

FILE 'HOME' ENTERED AT 15:25:01 ON 20 JUN 2002)

FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,
USPATFULL, JAPIO' ENTERED AT 15:25:11 ON 20 JUN 2002

L1 137383 S SUPEROXIDE DISMUTASE
L2 67553 S NEISSERIA
L3 3585 S CUZN SUPEROXIDE DISMUTASE OR (CUZNSOD)
L4 3504 S L1 AND L3
L5 81840 S HAEMOPHILUS
L6 17037 S ACTINOBACILLUS
L7 32414 S PASTEURELLA
L8 249034 S SALMONELLA
L9 1058014 S ESCHERICHIA
L10 7 S L4 AND L5
L11 2 DUP REM L10 (5 DUPLICATES REMOVED)
L12 0 S L4 AND L6
L13 0 S L4 AND L7
L14 74 S L1 AND L6
L15 88 S L1 AND L7
L16 37 DUP REM L14 (37 DUPLICATES REMOVED)
L17 52 DUP REM L15 (36 DUPLICATES REMOVED)
L18 23 S L4 AND L8
L19 14 DUP REM L18 (9 DUPLICATES REMOVED)
L20 145 S L4 AND L9
L21 82 DUP REM L20 (63 DUPLICATES REMOVED)
L22 1400 S (VACCIN? OR IMMUNIZ?) AND L1
L23 44 S L22 AND L2

L27 ANSWER 46 OF 52 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
6
AN 1995:532743 BIOSIS
DN PREV199598547043
TI Bacterial (Cu,Zn)-**superoxide dismutase**:
Phylogenetically distinct from the eukaryotic enzyme, and not so rare
after all.
AU Kroll, J. Simon (1); Langford, Paul R.; Wilks, Kathryn E.; Keil, Anthony
D.
CS (1) Mol. Infect. Dis. Group, Dep. Paediatr., Imperial Coll. Sci. Technol.
Med., St. Mary's Hosp., London W2 1PG UK
SO Microbiology (Reading), (1995) Vol. 141, No. 9, pp. 2271-2279.
ISSN: 1350-0872.
DT Article
LA English
AB Copper- and zinc-containing **superoxide dismutases**
((Cu,Zn)-SODs) are generally considered almost exclusively eukaryotic
enzymes, protecting the cytosol and extracellular compartments of higher
organisms from damage by oxygen free-radicals. The recent description of a
few examples of bacterial forms of the enzyme, located in the periplasm of
different Gram-negative micro-organisms, prompted a re-evaluation of this
general perception. A PCR-based approach has been developed and used
successfully to identify bacterial genes encoding (Cu,Zn)-SOD in a wide
range of important human and animal pathogens - members of the
Haemophilus, Actinobacillus and **Pasteurella** (HAP) group, and
Neisseria meningitidis. Comparison of (Cu,Zn)-SOD peptide sequences found
in Haemophilus ducreyi, Actinobacillus pleuropneumoniae, Actinobacillus
actinomycetemcomitans, **Pasteurella** multocida, and N.
meningitidis with previously described bacterial proteins and examples of
eukaryotic (Cu,Zn)-SOD has shown that the bacterial proteins constitute a
distinct family apparently widely separated in evolutionary terms from the
eukaryotic examples. The widespread occurrence of (Cu,Zn)-SOD in the
periplasm of bacterial pathogens, appropriately located to dismutate
exogenously derived superoxide radical anions, suggests that this enzyme
may play a role in the interactive biology of organisms with their hosts
and so contribute to their capacity to cause disease.

L27 ANSWER 41 OF 52 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
4
AN 1997:294288 BIOSIS
DN PREV199799593491
TI Divergent activity and function of **superoxide dismutases**
in **Pasteurella** haemolytica serotypes A1 and A2 and
Pasteurella trehalosi serotype T10.
AU Rowe, H. A.; Knox, D. P.; Poxton, I. R.; Donachie, W. (1)
CS (1) Moredun Res. Inst., 408 Glimerton Rd., Edinburgh EH17 7JH UK
SO FEMS Microbiology Letters, (1997) Vol. 150, No. 2, pp. 197-202.
ISSN: 0378-1097.
DT Article
LA English
AB Representative strains of **Pasteurella** haemolytica serotypes A1
and A2 and **Pasteurella** trehalosi serotype T10 were examined for
the presence of **superoxide dismutase**. Visualisation of
superoxide dismutase enzyme activity on polyacrylamide
gels, and specific inhibition with potassium cyanide verified a
copper/zinc (Cu/Zn) **superoxide dismutase** only in
serotype A2 whereas serotypes A1 and T10 showed other **superoxide**
dismutase activity. Using a simple freeze-thaw method the cellular
location of **superoxide dismutase** enzyme activity was
determined in all three serotypes. In serotypes A1 and A2 but not T10
superoxide dismutases were located in the periplasm. The
viability of serotypes A2 and T10 cells in the presence of exogenous
superoxide was unchanged over a 30 min period, whereas serotype A1 cells
declined in viability between 15 and 30 min. Purified immunoglobulin from
sheep convalescent serum did not reduce **superoxide**
dismutase activity in the serotypes in an in vitro assay. The
presence of this enzyme within the **pasteurellae** suggests a
supportive role in the virulence of this major pathogen of ruminants.

=>

11 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
 AB The sodC gene encoding the periplasmic enzyme copper/zinc **superoxide dismutase** (CuZnSOD) has been cloned from *Haemophilus ducreyi*, the causative agent of the genital ulcer disease, chancroid. Examination of a collection of diverse strains indicates that it is present throughout the species. Cloned sodC has been expressed in *E. coli* and shown to encode active enzyme. Insertional mutagenesis was used to construct a non-functional version of the gene. This has been transferred into the chromosome of the parent *H. ducreyi* strain by electroporation and homologous recombination, in preparation for studies of the role of this enzyme in the interactive biology of the organism with its host, perhaps in protecting bacteria from superoxide radicals and their reactive progeny generated by neutrophils in the context of host defence.

AN 1997:273113 BIOSIS
 DN PREV199799564831
 TI Distribution, cloning, characterisation and mutagenesis of sodC, the gene encoding copper/zinc **superoxide dismutase**, a potential determinant of virulence, in *Haemophilus ducreyi*.
 AU Langford, Paul R. (1); Kroll, J. Simon
 CS (1) Molecular Infect. Dis. Group, Dep. Paediatrics, Imperial Coll. Sch. Med., St. Mary's, Norfolk Place, London W2 1NY UK
 SO FEMS Immunology and Medical Microbiology, (1997) Vol. 17, No. 4, pp. 235-242.
 ISSN: 0928-8244.
 DT Article
 LA English

L11 ANSWER 2 OF 2 MEDLINE
 AB Eukaryotic Cu,Zn **superoxide dismutases** (CuZnSODs) are antioxidant enzymes remarkable for their unusually stable beta-barrel fold and dimer assembly, diffusion-limited catalysis, and electrostatic guidance of their free radical substrate. Point mutations of CuZnSOD cause the fatal human neurodegenerative disease amyotrophic lateral sclerosis. We determined and analyzed the first crystallographic structure (to our knowledge) for CuZnSOD from a prokaryote, *Photobacterium leiognathi*, a luminescent symbiont of *Leiognathid* fish. This structure, exemplifying prokaryotic CuZnSODs, shares the active-site ligand geometry and the topology of the Greek key beta-barrel common to the eukaryotic CuZnSODs. However, the beta-barrel elements recruited to form the dimer interface, the strategy used to forge the channel for electrostatic recognition of superoxide radical, and the connectivity of the intrasubunit disulfide bond in *P. leiognathi* CuZnSOD are discrete and strikingly dissimilar from those highly conserved in eukaryotic CuZnSODs. This new CuZnSOD structure broadens our understanding of structural features necessary and sufficient for CuZnSOD activity, highlights a hitherto unrecognized adaptability of the Greek key beta-barrel building block in evolution, and reveals that prokaryotic and eukaryotic enzymes diverged from one primordial CuZnSOD and then converged to distinct dimeric enzymes with electrostatic substrate guidance.

AN 97075068 MEDLINE
 DN 97075068 PubMed ID: 8917495
 TI Novel dimeric interface and electrostatic recognition in bacterial Cu,Zn **superoxide dismutase**.
 AU Bourne Y; Redford S M; Steinman H M; Lepock J R; Tainer J A; Getzoff E D
 CS Scripps Research Institute, La Jolla, CA 92037, USA.
 NC GM-37684 (NIGMS)
 GM-39345 (NIGMS)
 SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1996 Nov 12) 93 (23) 12774-9.
 Journal code: 7505876. ISSN: 0027-8424.
 CY United States

DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199612
ED Entered STN: 19970128
Last Updated on STN: 19970128
Entered Medline: 19961230

=>

L10 ANSWER 1 OF 7 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 AN 1997:273113 BIOSIS
 DN PREV199799564831
 TI Distribution, cloning, characterisation and mutagenesis of sodC, the gene encoding copper/zinc **superoxide dismutase**, a potential determinant of virulence, in *Haemophilus ducreyi*.
 AU Langford, Paul R. (1); Kroll, J. Simon
 CS (1) Molecular Infect. Dis. Group, Dep. Paediatrics, Imperial Coll. Sch. Med., St. Mary's, Norfolk Place, London W2 1NY UK
 SO ~~FEMS Immunology and Medical Microbiology~~, (1997) Vol. 17, No. 4, pp. 235-242.
 ISSN: 0928-8244.
 DT Article
 LA English
 AB The sodC gene encoding the periplasmic enzyme copper/zinc **superoxide dismutase (CuZnSOD)** has been cloned from *Haemophilus ducreyi*, the causative agent of the genital ulcer disease, chancroid. Examination of a collection of diverse strains indicates that it is present throughout the species. Cloned sodC has been expressed in *E. coli* and shown to encode active enzyme. Insertional mutagenesis was used to construct a non-functional version of the gene. This has been transferred into the chromosome of the parent *H. ducreyi* strain by electroporation and homologous recombination, in preparation for studies of the role of this enzyme in the interactive biology of the organism with its host, perhaps in protecting bacteria from superoxide radicals and their reactive progeny generated by neutrophils in the context of host defence.

L10 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:243569 CAPLUS
 DN 126:312928
 TI Distribution, cloning, characterization and mutagenesis of sodC, the gene encoding copper/zinc **superoxide dismutase**, a potential determinant of virulence, in *Haemophilus ducreyi*.
 AU Langford, Paul R.; Kroll, J. Simon
 CS Molecular Infectious Diseases Group, Department of Paediatrics, Imperial College School of Medicine at St Mary's, Norfolk Place, London, W2 1NY, UK
 SO FEMS Immunol. Med. Microbiol. (1997), 17(4), 235-242
 CODEN: FIMIEV; ISSN: 0928-8244
 PB Elsevier
 DT Journal
 LA English
 AB The sodC gene encoding the periplasmic enzyme copper/zinc **superoxide dismutase (CuZnSOD)** has been cloned from *Haemophilus ducreyi*, the causative agent of the genital ulcer disease, chancroid. Examn. of a collection of diverse strains indicates that it is present throughout the species. Cloned sodC has been expressed in *E. coli* and shown to encode active enzyme. Insertional mutagenesis was used to construct a non-functional version of the gene. This has been transferred into the chromosome of the parent *H. ducreyi* strain by electroporation and homologous recombination, in prepn. for studies of the role of this enzyme in the interactive biol. of the organism with its host, perhaps in protecting bacteria from superoxide radicals and their reactive progeny generated by neutrophils in the context of host defense.

L10 ANSWER 3 OF 7 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
 AN 97119044 EMBASE
 DN 1997119044
 TI Distribution, cloning, characterisation and mutagenesis of sodC, the gene encoding copper/zinc **superoxide dismutase**, a potential determinant of virulence, in *Haemophilus ducreyi*.
 AU Langford P.R.; Kroll J.S.
 CS P.R. Langford, Molecular Infectious Diseases Group, Department of

Paediatrics, Imperial College School of Medicine, Norfolk Place, London W2 1NY, United Kingdom. p.langford@ic.ac.uk

SO FEMS Immunology and Medical Microbiology, (1997) 17/4 (235-242).

Refs: 30

ISSN: 0928-8244 CODEN: FIMIEV

PUI S 0928-8244(97)00011-4

CY Netherlands

DT Journal; Article

FS 004 Microbiology

LA English

SL English

AB The sodC gene encoding the periplasmic enzyme copper/zinc

superoxide dismutase (CuZnSOD) has been cloned

from *Haemophilus ducreyi*, the causative agent of the genital ulcer disease, chancroid. Examination of a collection of diverse strains indicates that it is present throughout the species. Cloned sodC has been expressed in *E. coli* and shown to encode active enzyme. Insertional mutagenesis was used to construct a non-functional version of the gene. This has been transferred into the chromosome of the parent *H. ducreyi* strain by electroporation and homologous recombination, in preparation for studies of the role of this enzyme in the interactive biology of the organism with its host, perhaps in protecting bacteria from superoxide radicals and their reactive progeny generated by neutrophils in the context of host defence.

L10 ANSWER 4 OF 7 LIFESCI COPYRIGHT 2002 CSA

AN 97:71497 LIFESCI

TI Distribution, cloning, characterisation and mutagenesis of sodC, the gene encoding copper/zinc **superoxide dismutase**, a potential determinant of virulence, in *Haemophilus ducreyi*

AU Langford, P.R.; Kroll, J.S.

CS Molecular Infectious Diseases Group, Department of Paediatrics, Imperial College School of Medicine at St Mary's, Norfolk Place, London W2 1NY, UK

SO FEMS IMMUNOL. MED. MICROBIOL., (1997) vol. 17, no. 4, pp. 235-242.

ISSN: 0928-8244.

DT Journal

FS J; N

LA English

SL English

AB The sodC gene encoding the periplasmic enzyme copper/zinc

superoxide dismutase (CuZnSOD) has been cloned

from *Haemophilus ducreyi*, the causative agent of the genital ulcer disease, chancroid. Examination of a collection of diverse strains indicates that it is present throughout the species. Cloned sodC has been expressed in *E. coli* and shown to encode active enzyme. Insertional mutagenesis was used to construct a non-functional version of the gene. This has been transferred into the chromosome of the parent *H. ducreyi* strain by electroporation and homologous recombination, in preparation for studies of the role of this enzyme in the interactive biology of the organism with its host, perhaps in protecting bacteria from superoxide radicals and their reactive progeny generated by neutrophils in the context of host defence.

L10 ANSWER 5 OF 7 MEDLINE

AN 97288949 MEDLINE

DN 97288949 PubMed ID: 9143881

TI Distribution, cloning, characterisation and mutagenesis of sodC, the gene encoding copper/zinc **superoxide dismutase**, a potential determinant of virulence, in *Haemophilus ducreyi*.

AU Langford P R; Kroll J S

CS Department of Paediatrics, Imperial College School of Medicine at St Mary's, London, UK.. p.langford@ic.ac.uk

SO FEMS IMMUNOLOGY AND MEDICAL MICROBIOLOGY, (1997 Apr) 17 (4) 235-42.

Journal code: 9315554. ISSN: 0928-8244.

CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 OS GENBANK-X98737
 EM 199708
 ED Entered STN: 19970908
 Last Updated on STN: 19990129
 Entered Medline: 19970825

AB The sodC gene encoding the periplasmic enzyme copper/zinc **superoxide dismutase (CuZnSOD)** has been cloned from *Haemophilus ducreyi*, the causative agent of the genital ulcer disease, chancroid. Examination of a collection of diverse strains indicates that it is present throughout the species. Cloned sodC has been expressed in *E. coli* and shown to encode active enzyme. Insertional mutagenesis was used to construct a non-functional version of the gene. This has been transferred into the chromosome of the parent *H. ducreyi* strain by electroporation and homologous recombination, in preparation for studies of the role of this enzyme in the interactive biology of the organism with its host, perhaps in protecting bacteria from superoxide radicals and their reactive progeny generated by neutrophils in the context of host defence.

L10 ANSWER 6 OF 7 MEDLINE
 AN 97075068 MEDLINE
 DN 97075068 PubMed ID: 8917495
 TI Novel dimeric interface and electrostatic recognition in bacterial Cu,Zn **superoxide dismutase**.
 AU Bourne Y; Redford S M; Steinman H M; Lepock J R; Tainer J A; Getzoff E D
 CS Scripps Research Institute, La Jolla, CA 92037, USA.
 NC GM-37684 (NIGMS)
 GM-39345 (NIGMS)
 SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1996 Nov 12) 93 (23) 12774-9.
 Journal code: 7505876. ISSN: 0027-8424.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199612
 ED Entered STN: 19970128
 Last Updated on STN: 19970128
 Entered Medline: 19961230

AB Eukaryotic Cu,Zn **superoxide dismutases (CuZnSODs)** are antioxidant enzymes remarkable for their unusually stable beta-barrel fold and dimer assembly, diffusion-limited catalysis, and electrostatic guidance of their free radical substrate. Point mutations of **CuZnSOD** cause the fatal human neurodegenerative disease amyotrophic lateral sclerosis. We determined and analyzed the first crystallographic structure (to our knowledge) for **CuZnSOD** from a prokaryote, *Photobacterium leiognathi*, a luminescent symbiont of *Leiognathid* fish. This structure, exemplifying prokaryotic **CuZnSODs**, shares the active-site ligand geometry and the topology of the Greek key beta-barrel common to the eukaryotic **CuZnSODs**. However, the beta-barrel elements recruited to form the dimer interface, the strategy used to forge the channel for electrostatic recognition of superoxide radical, and the connectivity of the intrasubunit disulfide bond in *P. leiognathi* **CuZnSOD** are discrete and strikingly dissimilar from those highly conserved in eukaryotic **CuZnSODs**. This new **CuZnSOD** structure broadens our understanding of structural features necessary and sufficient for **CuZnSOD** activity, highlights a hitherto unrecognized adaptability of the Greek key beta-barrel building block in evolution, and reveals that prokaryotic and eukaryotic enzymes diverged from one primordial **CuZnSOD** and then

converged to distinct dimeric enzymes with electrostatic substrate guidance.

L10 ANSWER 7 OF 7 SCISEARCH COPYRIGHT 2002 ISI (R)
AN 97:333812 SCISEARCH
GA The Genuine Article (R) Number: WV713
TI Distribution, cloning, characterisation and mutagenesis of sodC, the gene encoding copper/zinc **superoxide dismutase**, a potential determinant of virulence, in **Haemophilus ducreyi**
AU Langford P R (Reprint); Kroll J S
CS ST MARYS HOSP, IMPERIAL COLL SCH MED, MOL INFECT DIS GRP, DEPT PAEDIAT, LONDON W2 1NY, ENGLAND (Reprint)
CYA ENGLAND
SO FEMS IMMUNOLOGY AND MEDICAL MICROBIOLOGY, (APR 1997) Vol. 17, No. 4, pp. 235-242.
Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS.
ISSN: 0928-8244.
DT Article; Journal
FS LIFE
LA English
REC Reference Count: 30
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB The sodC gene encoding the periplasmic enzyme copper/zinc **superoxide dismutase** (CuZnSOD) has been cloned from **Haemophilus ducreyi**, the causative agent of the genital ulcer disease, chancroid. Examination of a collection of diverse strains indicates that it is present throughout the species. Cloned sodC has been expressed in E. coli and shown to encode active enzyme. Insertional mutagenesis was used to construct a non-functional version of the gene. This has been transferred into the chromosome of the parent H. ducreyi strain by electroporation and homologous recombination, in preparation for studies of the role of this enzyme in the interactive biology of the organism with its host, perhaps in protecting bacteria from superoxide radicals and their reactive progeny generated by neutrophils in the context of host defence.

=>

L14 ANSWER 1 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 2001:209305 BIOSIS
 DOCUMENT NUMBER: PREV200100209305
 TITLE: A simple technique for the simultaneous determination of molecular weight and activity of **superoxide dismutase** using SDS-PAGE.
 AUTHOR(S): Chen, Jia-Rong; Liao, Chao-Wei; Mao, Simon J. T.; Chen, Ter-Hsin; Weng, Chung-Nan (1)
 CORPORATE SOURCE: (1) Department of Pathobiology, Pig Research Institute Taiwan, Chunan, Miaoli, 35099: cnw01@vax1.prit.org.tw Taiwan
 SOURCE: Journal of Biochemical and Biophysical Methods, (26 February, 2001) Vol. 47, No. 3, pp. 233-237. print. ISSN: 0165-022X.
 DOCUMENT TYPE: Article
 LANGUAGE: English
 SUMMARY LANGUAGE: English

L14 ANSWER 2 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 2000:490027 BIOSIS
 DOCUMENT NUMBER: PREV200000490148
 TITLE: Functional and crystallographic characterization of *Salmonella typhimurium* Cu,Zn **superoxide dismutase** coded by the sodCI virulence gene.
 AUTHOR(S): Pesce, Alessandra; Battistoni, Andrea; Stroppolo, Maria Elena; Polizio, Francesca; Nardini, Marco; Kroll, J. Simon; Langford, Paul R.; O'Neill, Peter; Sette, Marco; Desideri, Alessandro (1); Bolognesi, Martino
 CORPORATE SOURCE: (1) INFM, University of Rome "Tor Vergata", Via della Ricerca Scientifica, 00133, Rome Italy
 SOURCE: Journal of Molecular Biology, (15 September, 2000) Vol. 302, No. 2, pp. 465-478. print. ISSN: 0022-2836.
 DOCUMENT TYPE: Article
 LANGUAGE: English
 SUMMARY LANGUAGE: English

L14 ANSWER 3 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 2000:400616 BIOSIS
 DOCUMENT NUMBER: PREV200000400616
 TITLE: (Cu,Zn)-**superoxide dismutase** mutants of the swine pathogen *Actinobacillus pleuropneumoniae* are unattenuated in infections of the natural host.
 AUTHOR(S): Sheehan, Brian J.; Langford, Paul R.; Rycroft, Andrew N.; Kroll, J. Simon (1)
 CORPORATE SOURCE: (1) Molecular Infectious Diseases Group, Department of Paediatrics, Imperial College School of Medicine, St. Mary's Campus, London, W2 1PG UK
 SOURCE: Infection and Immunity, (August, 2000) Vol. 68, No. 8, pp. 4778-4781. print. ISSN: 0019-9567.
 DOCUMENT TYPE: Article
 LANGUAGE: English
 SUMMARY LANGUAGE: English

L14 ANSWER 4 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 2000:166587 BIOSIS
 DOCUMENT NUMBER: PREV200000166587
 TITLE: Cu,Zn **superoxide dismutase** structure from a microbial pathogen establishes a class with a conserved dimer interface.
 AUTHOR(S): Forest, Katrina T. (1); Langford, Paul R.; Kroll, J. Simon; Getzoff, Elizabeth D. (1)

CORPORATE SOURCE: (1) Department of Molecular Biology, Skaggs Institute for Chemical Biology, Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA, 92037 USA

SOURCE: Journal of Molecular Biology., (Feb. 11, 2000) Vol. 296, No. 1, pp. 145-153.
ISSN: 0022-2836.

DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

L14 ANSWER 5 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1998:75327 BIOSIS
DOCUMENT NUMBER: PREV199800075327
TITLE: Unique structural features of the monomeric Cu,Zn **superoxide dismutase** from *Escherichia coli*, revealed by X-ray crystallography.

AUTHOR(S): Pesce, Alessandra; Capasso, Clemente; Battistoni, Andrea; Folcarelli, Silvia; Rotilio, Giuseppe; Desideri, Alessandro; Bolognesi, Martino (1)

CORPORATE SOURCE: (1) Cent. Biotechnologie Avanzate-IST, Dipartimento di Fisica and INFN, Universita di Genova, Largo Rosanna Benzi 10, 16132 Genova Italy

SOURCE: Journal of Molecular Biology, (Dec. 5, 1997) Vol. 274, No. 3, pp. 408-420.
ISSN: 0022-2836.

DOCUMENT TYPE: Article
LANGUAGE: English

L14 ANSWER 6 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1997:21146 BIOSIS
DOCUMENT NUMBER: PREV199799320349
TITLE: Cloning and molecular characterization of Cu,Zn **superoxide dismutase** from *Actinobacillus pleuropneumoniae*.

AUTHOR(S): Langford, Paul R.; Loynds, Barbara M.; Kroll, J. Simon (1)

CORPORATE SOURCE: (1) Molecular Infectious Diseases Group, Imperial Coll. Sch. Med. St. Mary's, London W2 1PG UK

SOURCE: Infection and Immunity, (1996) Vol. 64, No. 12, pp. 5035-5041.
ISSN: 0019-9567.

DOCUMENT TYPE: Article
LANGUAGE: English

L14 ANSWER 7 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1996:483872 BIOSIS
DOCUMENT NUMBER: PREV199699199128
TITLE: Genomic clusters and codon usage in relation to gene expression in oral gram-negative anaerobes.

AUTHOR(S): Gharbia, Saheer E. (1); Williams, Jonathan C.; Andrews, David M. A.; Shah, Haroun N.

CORPORATE SOURCE: (1) Eastman Dent. Inst., Dep. Microbiol., 256 Gray's Inn Rd., London WC1X 8LD UK

SOURCE: Anaerobe, (1995) Vol. 1, No. 5, pp. 239-262.
ISSN: 1075-9964.

DOCUMENT TYPE: General Review
LANGUAGE: English

L14 ANSWER 8 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1996:259794 BIOSIS
DOCUMENT NUMBER: PREV199698815923
TITLE: Cloning, sequencing and expressing of Mn and Cu,Zn **superoxide dismutases** from *Actinobacillus pleuropneumoniae*.

AUTHOR(S): Helie, M.-C. (1); Sirois, M.; Quелlette, C. (1); Verret, L.

(1); Boissinot, M. (1)
CORPORATE SOURCE: (1) Univ. Laval, Ste-Foy, PQ Canada
SOURCE: Abstracts of the General Meeting of the American Society
for Microbiology, (1996) Vol. 96, No. 0, pp. 246.
Meeting Info.: 96th General Meeting of the American Society
for Microbiology New Orleans, Louisiana, USA May 19-23,
1996
ISSN: 1060-2011.
DOCUMENT TYPE: Conference
LANGUAGE: English

L14 ANSWER 9 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1996:138170 BIOSIS
DOCUMENT NUMBER: PREV199698710305
TITLE: **Actinobacillus pleuropneumoniae** encodes a
periplasmic copper zinc **superoxide**
dismutase.
AUTHOR(S): Langford, P. R.; Kroll, J. S.
CORPORATE SOURCE: Molecular infectious Diseases Group, Dep. Paediatr., St.
Mary's Hosp. Med. Sch., London W2 1PG UK
SOURCE: Donachie, W. [Editor]; Lainson, F. A. [Editor]; Hodgson, J.
C. [Editor]. (1995) pp. 205. Haemophilus, Actinobacillus,
and Pasteurella.
Publisher: Plenum Press 233 Spring Street, New York, New
York, USA.
Meeting Info.: Third International Conference on
Haemophilus, Actinobacillus, and Pasteurella (HAP94)
Edinburgh, Scotland, UK 1994
ISBN: 0-306-45104-2.
DOCUMENT TYPE: Conference
LANGUAGE: English

L14 ANSWER 10 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1995:532743 BIOSIS
DOCUMENT NUMBER: PREV199598547043
TITLE: Bacterial (Cu,Zn)-**superoxide dismutase**:
Phylogenetically distinct from the eukaryotic enzyme, and
not so rare after all.
AUTHOR(S): Kroll, J. Simon (1); Langford, Paul R.; Wilks, Kathryn E.;
Keil, Anthony D.
CORPORATE SOURCE: (1) Mol. Infect. Dis. Group, Dep. Paediatr., Imperial Coll.
Sci. Technol. Med., St. Mary's Hosp., London W2 1PG UK
SOURCE: Microbiology (Reading), (1995) Vol. 141, No. 9, pp.
2271-2279.
ISSN: 1350-0872.
DOCUMENT TYPE: Article
LANGUAGE: English

L14 ANSWER 11 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1993:119192 BIOSIS
DOCUMENT NUMBER: PREV199395063292
TITLE: An in vitro study of polymorphonuclear leucocyte-mediated
injury to human gingival keratinocytes by periodontopathic
bacterial extracts.
AUTHOR(S): Sugiyama, E. (1); Baehni, P.; Cimasoni, G. (1)
CORPORATE SOURCE: (1) Div. Physiopathology, Sch. Dental Med., Univ. Geneva,
Geneva Switzerland
SOURCE: Archives of Oral Biology, (1992) Vol. 37, No. 12, pp.
1007-1012.
ISSN: 0003-9969.
DOCUMENT TYPE: Article
LANGUAGE: English

L14 ANSWER 12 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 1992:390184 BIOSIS
DOCUMENT NUMBER: BA94:62359
TITLE: POLYMORPHONUCLEAR LEUKOCYTE-MEDIATED EFFECTS ON HUMAN ORAL
KERATINOCYTES BY PERIODONTOPATHIC BACTERIAL EXTRACTS.
AUTHOR(S): SUGIYAMA E
CORPORATE SOURCE: DEP. PERIODONTOL., FAC. DENTISTRY, TOKYO MED. DENT. UNIV.,
TOKYO, JPN.
SOURCE: J STOMATOL SOC JPN, (1992) 59 (1), 75-87.
CODEN: KOGZA9. ISSN: 0300-9149.
FILE SEGMENT: BA; OLD
LANGUAGE: Japanese

L14 ANSWER 13 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1992:173553 BIOSIS
DOCUMENT NUMBER: BR42:78553
TITLE: RECF IN **ACTINOBACILLUS**-PLEUROPNEUMONIAE.
AUTHOR(S): LOYNDS B M; LANGFORD P R; KROLL J S
CORPORATE SOURCE: MOL. INFECTION DIS. GROUP, DEP. PAEDIATR., INST. MOL. MED.,
UNIV. OXFORD, JOHN RADCLIFFE HOSP., OXFORD OX3 9DU, UK.
SOURCE: Nucleic Acids Res., (1992) 20 (3), 615.
CODEN: NARHAD. ISSN: 0305-1048.
FILE SEGMENT: BR; OLD
LANGUAGE: English

L14 ANSWER 14 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1992:119149 BIOSIS
DOCUMENT NUMBER: BA93:64949
TITLE: SENSITIVITY OF **ACTINOBACILLUS**-
ACTINOMYCETEMCOMITANS AND HAEMOPHILUS-APHROPHILUS TO
OXIDATIVE KILLING.
AUTHOR(S): DONGARI A I; MIYASAKI K T
CORPORATE SOURCE: SECT. ORAL BIOL. CHS 63-050, UCLA SCH. DENT., CENT. HEALTH
SCI., LOS ANGELES, CALIF. 90024-1668, USA.
SOURCE: ORAL MICROBIOL IMMUNOL, (1991) 6 (6), 363-372.
CODEN: OMIMEE. ISSN: 0902-0055.
FILE SEGMENT: BA; OLD
LANGUAGE: English

L14 ANSWER 15 OF 74 CABA COPYRIGHT 2002 CABI
ACCESSION NUMBER: 2000:127368 CABA
DOCUMENT NUMBER: 20002217532
TITLE: [Cu,Zn]-**Superoxide dismutase**
mutants of the swine pathogen **Actinobacillus**
pleuropneumoniae are unattenuated in infections of
the natural host
AUTHOR: Sheehan, B. J.; Langford, P. R.; Rycroft, A. N.;
Kroll, J. S.
CORPORATE SOURCE: Molecular Infectious Diseases Group, Department of
Paediatrics, Imperial College School of Medicine,
St. Mary's Campus, London W2 1PG, UK.
SOURCE: ~~Infection and Immunity~~, (2000) Vol. 68, No. 8, pp.
4778-4781. 41 ref.
ISSN: 0019-9567
DOCUMENT TYPE: Journal
LANGUAGE: English

L14 ANSWER 16 OF 74 CABA COPYRIGHT 2002 CABI
ACCESSION NUMBER: 97:81013 CABA
DOCUMENT NUMBER: 972207772
TITLE: Cloning and molecular characterization of Cu,Zn
superoxidase dismutase from **Actinobacillus**
pleuropneumoniae
AUTHOR: Langford, P. R.; Loynds, B. M.; Kroll, J. S.
CORPORATE SOURCE: Molecular Infectious Diseases Group, Imperial

College School of Medicine at St. Mary's, London W2 1PG, UK.

SOURCE: Infection and Immunity, (1996) Vol. 64, No. 12, pp. 5035-5041. 57 ref.
ISSN: 0019-9567

DOCUMENT TYPE: Journal

LANGUAGE: English

L14 ANSWER 17 OF 74 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:163109 CAPLUS

DOCUMENT NUMBER: 134:337443

TITLE: A simple technique for the simultaneous determination of molecular weight and activity of **superoxide dismutase** using SDS-PAGE

AUTHOR(S): Chen, J.-R.; Liao, C.-W.; Mao, S. J. T.; Chen, T.-H.; Weng, C.-N.

CORPORATE SOURCE: Department of Pathobiology, Pig Research Institute Taiwan, Chunan, Miaoli, 35099, Taiwan

SOURCE: Journal of Biochemical and Biophysical Methods (2001), 47(3), 233-237
CODEN: JBBMDG; ISSN: 0165-022X

PUBLISHER: Elsevier Science Ireland Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 18 OF 74 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:611385 CAPLUS

DOCUMENT NUMBER: 134:26886

TITLE: Functional and Crystallographic Characterization of Salmonella typhimurium Cu,Zn **Superoxide Dismutase** Coded by the sodCI Virulence Gene

AUTHOR(S): Pesce, Alessandra; Battistoni, Andrea; Stroppolo, Maria Elena; Polizio, Francesca; Nardini, Marco; Kroll, J. Simon; Langford, Paul R.; O'Neill, Peter; Sette, Marco; Desideri, Alessandro; Bolognesi, Martino

CORPORATE SOURCE: Department of Physics-INFN and Advanced Biotechnology Center-IST, University of Genoa, Genoa, I-16132, Italy

SOURCE: Journal of Molecular Biology (2000), 302(2), 465-478
CODEN: JMOBAK; ISSN: 0022-2836

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 19 OF 74 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:520016 CAPLUS

DOCUMENT NUMBER: 133:235048

TITLE: [Cu,Zn]-**superoxide dismutase** mutants of the swine pathogen **Actinobacillus pleuropneumoniae** are unattenuated in infections of the natural host

AUTHOR(S): Sheehan, Brian J.; Langford, Paul R.; Rycroft, Andrew N.; Kroll, J. Simon

CORPORATE SOURCE: Molecular Infectious Diseases Group, Department of Paediatrics, Imperial College School of Medicine, London, W2 1PG, UK

SOURCE: Infection and Immunity (2000), 68(8), 4778-4781
CODEN: INFIBR; ISSN: 0019-9567

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 20 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:161457 CAPLUS
DOCUMENT NUMBER: 132:206934
TITLE: Cu,Zn-Superoxide dismutase or
antibody thereto as vaccine against bacterial
(including meningococcal) infection
INVENTOR(S): Gorringer, Andrew Richard; Kroll, John Simon; Langford,
Paul Richard; Robinson, Andrew
PATENT ASSIGNEE(S): Microbiological Research Authority, UK; Imperial
College of Science, Technology and Medicine
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000012718	A1	20000309	WO 1999-GB2828	19990827
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9956350	A1	20000321	AU 1999-56350	19990827
EP 1108038	A1	20010620	EP 1999-943065	19990827
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

PRIORITY APPLN. INFO.: GB 1998-18756 A 19980827
WO 1999-GB2828 W 19990827
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 21 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:83022 CAPLUS
DOCUMENT NUMBER: 132:247933
TITLE: Cu,Zn Superoxide Dismutase
Structure from a Microbial Pathogen Establishes a
Class with a Conserved Dimer Interface
AUTHOR(S): Forest, Katrina T.; Langford, Paul R.; Kroll, J.
Simon; Getzoff, Elizabeth D.
CORPORATE SOURCE: Department of Molecular Biology and The Skaggs
Institute for Chemical Biology, The Scripps Research
Institute, La Jolla, CA, 92037, USA
SOURCE: Journal of Molecular Biology (2000), 296(1), 145-153
CODEN: JMOBAK; ISSN: 0022-2836
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 22 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:718617 CAPLUS
DOCUMENT NUMBER: 126:27467
TITLE: Cloning and molecular characterization of Cu,Zn

AUTHOR(S):
 CORPORATE SOURCE:
 SOURCE:
 PUBLISHER:
 DOCUMENT TYPE:
 LANGUAGE:

superoxide dismutase from
Actinobacillus pleuropneumoniae
 Langford, Paul R.; Loynds, Barbara M.; Kroll, J. Simon
 Mol. Infectious Diseases Group, Imperial Coll. Sch.
 Med., London, W2 1PG, UK
 Infection and Immunity (1996), 64(12), 5035-5041
 CODEN: INFIBR; ISSN: 0019-9567
 American Society for Microbiology
 Journal
 English

L14 ANSWER 23 OF 74 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1995:860120 CAPLUS
 DOCUMENT NUMBER: 124:48958
 TITLE: Bacterial [Cu,Zn]-**superoxide**
dismutase: phylogenetically distinct from the
 eukaryotic enzyme, and not so rare after all!
 AUTHOR(S): Kroll, J. Simon; Langford, Paul R.; Wilks, Kathryn E.;
 Keil, Anthony D.
 CORPORATE SOURCE: Molecular Infectious Diseases Group, Imperial College
 of Science, Technology and Medicine, London, W2 1PG,
 UK
 SOURCE: ~~Microbiology~~ (Reading, U. K.) (1995), 141(9), 2271-9
 CODEN: MROBEO; ISSN: 1350-0872
 DOCUMENT TYPE: Journal
 LANGUAGE: English

L14 ANSWER 24 OF 74 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1992:465009 CAPLUS
 DOCUMENT NUMBER: 117:65009
 TITLE: recF in **Actinobacillus pleuropneumoniae**
 AUTHOR(S): Loynds, Barbara M.; Langford, Paul R.; Kroll, J. Simon
 CORPORATE SOURCE: Inst. Mol. Med., Univ. Oxford, Oxford, OX3 9DU, UK
 SOURCE: Nucleic Acids Res. (1992), 20(3), 615
 CODEN: NARHAD; ISSN: 0305-1048
 DOCUMENT TYPE: Journal
 LANGUAGE: English

L14 ANSWER 25 OF 74 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1992:231747 CAPLUS
 DOCUMENT NUMBER: 116:231747
 TITLE: Sensitivity of **Actinobacillus**
 actinomycetemcomitans and Haemophilus aphrophilus to
 oxidative killing
 AUTHOR(S): Dongari, A. I.; Miyasaki, Kenneth T.
 CORPORATE SOURCE: Sch. Dent., UCLA, Los Angeles, CA, 90024-1668, USA
 SOURCE: Oral Microbiol. Immunol. (1991), 6(6), 363-72
 CODEN: OMIMEE; ISSN: 0902-0055
 DOCUMENT TYPE: Journal
 LANGUAGE: English

L14 ANSWER 26 OF 74 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
 ACCESSION NUMBER: 2001090874 EMBASE
 TITLE: A simple technique for the simultaneous determination of
 molecular weight and activity of **superoxide**
dismutase using SDS-PAGE.
 AUTHOR: Chen J.-R.; Liao C.-W.; Mao S.J.T.; Chen T.-H.; Weng C.-N.
 CORPORATE SOURCE: C.-N. Weng, Department of Pathobiology, Pig Research
 Institute Taiwan, P.O. Box 23, Chunan, Miaoli 35099,
 Taiwan, Province of China. cnw01@vax1.prit.org.tw
 SOURCE: Journal of Biochemical and Biophysical Methods, (26 Feb
 2001) 47/3 (233-237).
 Refs: 21
 ISSN: 0165-022X CODEN: JBBMDG

PUBLISHER IDENT.: S 0165-022X(00)00162-7
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L14 ANSWER 27 OF 74 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000351900 EMBASE
TITLE: Functional and crystallographic characterization of
Salmonella typhimurium Cu,Zn **superoxide**
dismutase coded by the sodCl virulence gene.
AUTHOR: Pesce A.; Battistoni A.; Stroppolo M.E.; Polizio F.;
Nardini M.; Kroll J.S.; Langford P.R.; O'Neill P.; Sette
M.; Desideri A.; Bolognesi M.
CORPORATE SOURCE: A. Desideri, INFM, Department of Biology, University of
Rome 'Tor Vergata', Via della Ricerca Scientifica, 00133
Rome, Italy. desider@uniroma2.it
SOURCE: Journal of Molecular Biology, (15 Sep 2000) 302/2
(465-478).
Refs: 57
ISSN: 0022-2836 CODEN: JMOBAK
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L14 ANSWER 28 OF 74 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000332783 EMBASE
TITLE: Cu,Zn **superoxide dismutase** structure
from a microbial pathogen establishes a class with a
conserved dimer interface.
AUTHOR: Forest K.T.; Langford P.R.; Kroll J.S.; Getzoff E.D.
CORPORATE SOURCE: E.D. Getzoff, Department of Molecular Biology, Skkags Inst.
for Chemical Biology, Scripps Research Institute, 10550
North Torrey Pines Road, San Diego, CA 92037, United
States. edg@scripps.edu
SOURCE: Journal of Molecular Biology, (11 Feb 2000) 296/1
(145-153).
Refs: 44
ISSN: 0022-2836 CODEN: JMOBAK
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L14 ANSWER 29 OF 74 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000271195 EMBASE
TITLE: [Cu,Zn]-**superoxide dismutase** mutants of
the swine pathogen **Actinobacillus**
pleuropneumoniae are unattenuated in infections of the
natural host.
AUTHOR: Sheehan B.J.; Langford P.R.; Rycroft A.N.; Kroll J.S.
CORPORATE SOURCE: J.S. Kroll, Molecular Infectious Diseases Group, Department
of Paediatrics, Imperial College School of Medicine, London
W2 1PG, United Kingdom. s.kroll@ic.ac.uk
SOURCE: Infection and Immunity, (2000) 68/8 (4778-4781).
Refs: 41
ISSN: 0019-9567 CODEN: INFIBR
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology

005 General Pathology and Pathological Anatomy
015 Chest Diseases, Thoracic Surgery and Tuberculosis
026 Immunology, Serology and Transplantation
LANGUAGE: English
SUMMARY LANGUAGE: English

L14 ANSWER 30 OF 74 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 96368809 EMBASE
DOCUMENT NUMBER: 1996368809
TITLE: Cloning and molecular characterization of Cu,Zn
superoxide dismutase from

Actinobacillus pleuropneumoniae.
AUTHOR: Langford P.R.; Loynds B.M.; Kroll J.S.
CORPORATE SOURCE: Molecular Infectious Diseases Group, Imperial College
School of Medicine, St. Mary's, London W2 1PG, United
Kingdom
SOURCE: Infection and Immunity, (1996) 64/12 (5035-5041).
ISSN: 0019-9567 CODEN: INFIBR
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

L14 ANSWER 31 OF 74 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 95310923 EMBASE
DOCUMENT NUMBER: 1995310923
TITLE: Bacterial [Cu,Zn]-**superoxide dismutase**:
Phylogenetically distinct from the eukaryotic enzyme, and
not so rare after all!.
AUTHOR: Kroll J.S.; Langford P.R.; Wilks K.E.; Keil A.D.
CORPORATE SOURCE: Molecular Infectious Diseases Group, Dept. Paediatrics, St
Mary's Hosp., Imperial Coll. Sci. Technology Med., London W2
1PG, United Kingdom
SOURCE: Microbiology, (1995) 141/9 (2271-2279).
ISSN: 1350-0872 CODEN: MROBEO
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

L14 ANSWER 32 OF 74 LIFESCI COPYRIGHT 2002 CSA
ACCESSION NUMBER: 2001:101381 LIFESCI
TITLE: Cu,Zn **Superoxide Dismutase** Structure
from a Microbial Pathogen Establishes a Class with a
Conserved Dimer Interface
AUTHOR: Forest, K.T.; Langford, P.R.; Kroll, J.S.; Getzoff, E.D.
CORPORATE SOURCE: Department of Bacteriology, University of Wisconsin, 1550
Linden Drive, Madison, WI, 53706, USA
SOURCE: Journal of Molecular Biology [J. Mol. Biol.], (20000211)
vol. 296, no. 1, pp. 145-153.
ISSN: 0022-2836.
DOCUMENT TYPE: Journal
FILE SEGMENT: J
LANGUAGE: English
SUMMARY LANGUAGE: English

L14 ANSWER 33 OF 74 LIFESCI COPYRIGHT 2002 CSA
ACCESSION NUMBER: 2000:114028 LIFESCI
TITLE: Functional and Crystallographic Characterization of
Salmonella typhimurium Cu,Zn **Superoxide**
Dismutase Coded by the sodCI Virulence Gene

AUTHOR: Pesce, A.; Battistoni, A.; Stroppolo, M.E.; Polizio, F.;
Nardini, M.; Kroll, J.S.; Langford, P.R.; O'Neill, P.;
Sette, M.; Desideri, A.; Bolognesi, M.
CORPORATE SOURCE: Department of Physics-INFM and Advanced Biotechnology
Center-IST, University of Genoa, Largo Rosanna Benzi,
Genova, 10. I-16132, Italy
SOURCE: Journal of Molecular Biology [J. Mol. Biol.], (20000915)
vol. 302, no. 2, pp. 465-478.
ISSN: 0022-2836.
DOCUMENT TYPE: Journal
FILE SEGMENT: J
LANGUAGE: English
SUMMARY LANGUAGE: English

L14 ANSWER 34 OF 74 LIFESCI COPYRIGHT 2002 CSA

ACCESSION NUMBER: 2000:113134 LIFESCI

TITLE: [Cu,Zn]-**Superoxide Dismutase** Mutants of
the Swine Pathogen **Actinobacillus**
pleuropneumoniae Are Unattenuated in Infections of the
Natural Host

AUTHOR: Sheehan, B.J.; Langford, P.R.; Rycroft, A.N.; Kroll, J.S.

CORPORATE SOURCE: Molecular Infectious Diseases Group, Department of
Paediatrics, Imperial College School of Medicine, St.
Mary's Campus, London W2 1PG, United Kingdom; E-mail:
s.kroll@ic.ac.uk

SOURCE: Infection and Immunity [Infect. Immun.], (20000800) vol.
68, no. 8, pp. 4778-4781.
ISSN: 0019-9567.

DOCUMENT TYPE: Journal

FILE SEGMENT: J

LANGUAGE: English

SUMMARY LANGUAGE: English

L14 ANSWER 35 OF 74 LIFESCI COPYRIGHT 2002 CSA

ACCESSION NUMBER: 97:22322 LIFESCI

TITLE: Cloning and molecular characterization of Cu,Zn
superoxide dismutase from
Actinobacillus pleuropneumoniae

AUTHOR: Langford, P.R.; Loynds, B.M.; Kroll, J.S.*

CORPORATE SOURCE: Molecular Infectious Diseases Group, Imperial College
School of Medicine at St. Mary's, London W2 1PG, UK

SOURCE: INFECT. IMMUN., (1996) vol. 64, no. 12, pp. 5035-5041.
ISSN: 0019-9567.

DOCUMENT TYPE: Journal

FILE SEGMENT: J; G; N

LANGUAGE: English

SUMMARY LANGUAGE: English

L14 ANSWER 36 OF 74 MEDLINE

ACCESSION NUMBER: 2001368755 MEDLINE

DOCUMENT NUMBER: 21142502 PubMed ID: 11245894

TITLE: A simple technique for the simultaneous determination of
molecular weight and activity of **superoxide**
dismutase using SDS-PAGE.

AUTHOR: Chen J; Liao C; Mao S J; Chen T; Weng C

CORPORATE SOURCE: Department of Pathobiology, Pig Research Institute Taiwan,
P.O. Box 23, Chunan, 35099, Miaoli, Taiwan, ROC.

SOURCE: JOURNAL OF BIOCHEMICAL AND BIOPHYSICAL METHODS, (2001 Feb
26) 47 (3) 233-7.

Journal code: 7907378. ISSN: 0165-022X.

PUB. COUNTRY: Netherlands

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200106
ENTRY DATE: Entered STN: 20010702
Last Updated on STN: 20010702
Entered Medline: 20010628

L14 ANSWER 37 OF 74 MEDLINE

ACCESSION NUMBER: 2000496871 MEDLINE
DOCUMENT NUMBER: 20428907 PubMed ID: 10970746
TITLE: Functional and crystallographic characterization of
Salmonella typhimurium Cu,Zn **superoxide**
dismutase coded by the sodCI virulence gene.
AUTHOR: Pesce A; Battistoni A; Stroppolo M E; Polizio F; Nardini M;
Kroll J S; Langford P R; O'Neill P; Sette M; Desideri A;
Bolognesi M
CORPORATE SOURCE: Department of Physics-INFM and Advanced Biotechnology
Center-IST, University of Genoa, Largo Rosanna Benzi,
Genova, 10. I-16132, Italy.
SOURCE: JOURNAL OF MOLECULAR BIOLOGY, (2000 Sep 15) 302 (2) 465-78.
Journal code: 2985088R. ISSN: 0022-2836.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: PDB-1EQW
ENTRY MONTH: 200010
ENTRY DATE: Entered STN: 20001027
Last Updated on STN: 20001027
Entered Medline: 20001019

L14 ANSWER 38 OF 74 MEDLINE

ACCESSION NUMBER: 2000404355 MEDLINE
DOCUMENT NUMBER: 20359380 PubMed ID: 10899887
TITLE: Cu,Zn]-**Superoxide dismutase** mutants of
the swine pathogen **Actinobacillus**
pleuropneumoniae are unattenuated in infections of the
natural host.
AUTHOR: Sheehan B J; Langford P R; Rycroft A N; Kroll J S
CORPORATE SOURCE: Molecular Infectious Diseases Group, Department of
Paediatrics, Imperial College School of Medicine, St.
Mary's Campus, London W2 1PG, United Kingdom.
SOURCE: INFECTION AND IMMUNITY, (2000 Aug) 68 (8) 4778-81.
Journal code: 0246127. ISSN: 0019-9567.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200008
ENTRY DATE: Entered STN: 20000901
Last Updated on STN: 20000901
Entered Medline: 20000824

L14 ANSWER 39 OF 74 MEDLINE

ACCESSION NUMBER: 2000124004 MEDLINE
DOCUMENT NUMBER: 20124004 PubMed ID: 10656823
TITLE: Cu,Zn **superoxide dismutase** structure
from a microbial pathogen establishes a class with a
conserved dimer interface.
AUTHOR: Forest K T; Langford P R; Kroll J S; Getzoff E D
CORPORATE SOURCE: Department of Molecular Biology and The Skaggs Institute
for Chemical Biology, The Scripps Research Institute, Mail
Drop MB-4, 10550 North Torrey Pines Road, La Jolla, CA
92037, USA.. forest@bact.wisc.edu
CONTRACT NUMBER: 1F32AI09186-01 (NIAID)
GM37864 (NIGMS)

SOURCE: JOURNAL OF MOLECULAR BIOLOGY, (2000 Feb 11) 296 (1) 145-53.
Journal code: 2985088R. ISSN: 0022-2836.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Space Life Sciences
OTHER SOURCE: PDB-2APS
ENTRY MONTH: 200003
ENTRY DATE: Entered STN: 20000327
Last Updated on STN: 20000327
Entered Medline: 20000314

L14 ANSWER 40 OF 74 MEDLINE
ACCESSION NUMBER: 97101016 MEDLINE
DOCUMENT NUMBER: 97101016 PubMed ID: 8945543
TITLE: Cloning and molecular characterization of Cu,Zn
superoxide dismutase from
Actinobacillus pleuropneumoniae.
AUTHOR: Langford P R; Loynds B M; Kroll J S
CORPORATE SOURCE: Molecular Infectious Diseases Group, Imperial College
School of Medicine at St. Mary's, London, United Kingdom.
SOURCE: INFECTION AND IMMUNITY, (1996 Dec) 64 (12) 5035-41.
Journal code: 0246127. ISSN: 0019-9567.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-X63626; GENBANK-X99396
ENTRY MONTH: 199701
ENTRY DATE: Entered STN: 19970128
Last Updated on STN: 19980206
Entered Medline: 19970108

L14 ANSWER 41 OF 74 MEDLINE
ACCESSION NUMBER: 96330990 MEDLINE
DOCUMENT NUMBER: 96330990 PubMed ID: 8767702
TITLE: Virulence factors of the swine pathogen
Actinobacillus pleuropneumoniae.
AUTHOR: Tascon R I; Vazquez-Boland J A; Gutierrez-Martin C B;
Rodriguez-Barbosa J I; Rodriguez-Ferri E F
CORPORATE SOURCE: Departamento de Patologia Animal-Sanidad Animal, Facultad
de Veterinaria, Universidad de Leon, Espana.
SOURCE: MICROBIOLOGIA, (1996 Jun) 12 (2) 171-84. Ref: 101
Journal code: 8904895. ISSN: 0213-4101.
PUB. COUNTRY: Spain
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199704
ENTRY DATE: Entered STN: 19970424
Last Updated on STN: 19970424
Entered Medline: 19970417

L14 ANSWER 42 OF 74 MEDLINE
ACCESSION NUMBER: 96118708 MEDLINE
DOCUMENT NUMBER: 96118708 PubMed ID: 7496539
TITLE: Bacterial [Cu,Zn]-**superoxide dismutase**:
phylogenetically distinct from the eukaryotic enzyme, and
not so rare after all!.
AUTHOR: Kroll J S; Langford P R; Wilks K E; Keil A D
CORPORATE SOURCE: Department of Paediatrics, Imperial College of Science,
Technology and Medicine, St Mary's Hospital, London, UK.

SOURCE: MICROBIOLOGY, (1995 Sep) 141 (Pt 9) 2271-9.
Journal code: 9430468. ISSN: 1350-0872.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Space Life Sciences
OTHER SOURCE: GENBANK-X83122; GENBANK-X83123; GENBANK-X83124;
GENBANK-X83125; GENBANK-X83126
ENTRY MONTH: 199601
ENTRY DATE: Entered STN: 19960217
Last Updated on STN: 19970203
Entered Medline: 19960116

L14 ANSWER 43 OF 74 MEDLINE
ACCESSION NUMBER: 93111878 MEDLINE
DOCUMENT NUMBER: 93111878 PubMed ID: 1471949
TITLE: An in vitro study of polymorphonuclear leucocyte-mediated
injury to human gingival keratinocytes by periodontopathic
bacterial extracts.
AUTHOR: Sugiyama E; Baehni P; Cimasoni G
CORPORATE SOURCE: Division of Physiopathology and Periodontology, School of
Dental Medicine, University of Geneva, Switzerland.
SOURCE: ARCHIVES OF ORAL BIOLOGY, (1992 Dec) 37 (12) 1007-12.
Journal code: 0116711. ISSN: 0003-9969.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Dental Journals; Priority Journals
ENTRY MONTH: 199301
ENTRY DATE: Entered STN: 19930212
Last Updated on STN: 20000303
Entered Medline: 19930126

L14 ANSWER 44 OF 74 MEDLINE
ACCESSION NUMBER: 92334913 MEDLINE
DOCUMENT NUMBER: 92334913 PubMed ID: 1668250
TITLE: Sensitivity of **Actinobacillus**
actinomycetemcomitans and Haemophilus aphrophilus to
oxidative killing.
AUTHOR: Dongari A I; Miyasaki K T
CORPORATE SOURCE: UCLA School of Dentistry, Center for the Health Sciences.
CONTRACT NUMBER: DE 00282 (NIDCR)
DE 08161 (NIDCR)
SOURCE: ORAL MICROBIOLOGY AND IMMUNOLOGY, (1991 Dec) 6 (6) 363-72.
Journal code: 8707451. ISSN: 0902-0055.
PUB. COUNTRY: Denmark
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Dental Journals
ENTRY MONTH: 199208
ENTRY DATE: Entered STN: 19920904
Last Updated on STN: 20000303
Entered Medline: 19920819

L14 ANSWER 45 OF 74 MEDLINE
ACCESSION NUMBER: 92300272 MEDLINE
DOCUMENT NUMBER: 92300272 PubMed ID: 1607829
TITLE: Polymorphonuclear leukocyte-mediated effects on human oral
keratinocytes by periodontopathic bacterial extracts.
AUTHOR: Sugiyama E
CORPORATE SOURCE: Department of Periodontology, Faculty of Dentistry, Tokyo
Medical and Dental University.
SOURCE: KOKUBYO GAKKAI ZASSHI. THE JOURNAL OF THE STOMATOLOGICAL
SOCIETY, JAPAN, (1992 Mar) 59 (1) 75-87.

JOURNAL code: 0413677. ISSN: 0300-9149.
PUB. COUNTRY: Japan
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Japanese
FILE SEGMENT: Dental Journals; Priority Journals
ENTRY MONTH: 199207
ENTRY DATE: Entered STN: 19920731
Last Updated on STN: 19920731
Entered Medline: 19920722

L14 ANSWER 46 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2002:328202 SCISEARCH
THE GENUINE ARTICLE: BU05Z
TITLE: Bacterial **superoxide dismutase** and
virulence
AUTHOR: Langford P R (Reprint); Sansone A; Valenti P; Battistoni
A; Kroll J S
CORPORATE SOURCE: Univ London Imperial Coll Sci & Technol, Dept Paediat, Mol
Infect Dis Grp, St Marys Hosp Campus, London W2 1PG,
England (Reprint); European Bioinformat Inst, EMBL Outstn,
Cambridge CB10 1SD, England; Univ Naples, Inst Microbiol
2, I-80138 Naples, Italy; Univ Roma Tor Vergata, Dept
Biol, I-00133 Rome, Italy; Univ London Imperial Coll Sci &
Technol, Dept Paediat, Mol Infect Dis Grp, London W2 1PG,
England
COUNTRY OF AUTHOR: England; Italy
SOURCE: SUPEROXIDE DISMUTASE, (APR 2002) Vol. 349, pp. 155-166.
Publisher: ACADEMIC PRESS INC, 525 B STREET, SUITE 1900,
SAN DIEGO, CA 92101-4495 USA.
ISSN: 0076-6879.
DOCUMENT TYPE: General Review; Journal
LANGUAGE: English
REFERENCE COUNT: 39

L14 ANSWER 47 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2002:299674 SCISEARCH
THE GENUINE ARTICLE: 535NT
TITLE: Streptococcus sanguis secretes CD14-binding proteins that
stimulate cytokine synthesis: a clue to the pathogenesis
of infective (bacterial) endocarditis?
AUTHOR: Banks J; Poole S; Nair S P; Lewthwaite J; Tabona P; McNab
R; Wilson M; Paul A; Henderson B (Reprint)
CORPORATE SOURCE: Univ Coll London, Eastman Dent Inst, Cellular Microbiol
Res Grp, 256 Grays Inn Rd, London WC1X 8LD, England
(Reprint); Univ Coll London, Eastman Dent Inst, Cellular
Microbiol Res Grp, London WC1X 8LD, England; Univ Coll
London, Eastman Dent Inst, Dept Microbiol, London WC1X
8LD, England; Natl Inst Biol Stand & Controls, Div
Endocrinol, Potters Bar EN6 3QG, Herts, England; Inst Canc
Res, Chester Beatty Labs, Ctr Cell & Mol Biol, London SW3
6JB, England
COUNTRY OF AUTHOR: England
SOURCE: MICROBIAL PATHOGENESIS, (MAR 2002) Vol. 32, No. 3, pp.
105-116.
Publisher: ACADEMIC PRESS LTD, 24-28 OVAL RD, LONDON NW1
7DX, ENGLAND.
ISSN: 0882-4010.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 33

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 48 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2002:109855 SCISEARCH

THE GENUINE ARTICLE: 516LY
 TITLE: ohr, encoding an organic hydroperoxide reductase, is an in vivo-induced gene in **Actinobacillus pleuropneumoniae**
 AUTHOR: Shea R J; Mulks M H (Reprint)
 CORPORATE SOURCE: Michigan State Univ, Dept Microbiol & Mol Genet, 401 Giltner Hall, E Lansing, MI 48824 USA (Reprint); Michigan State Univ, Dept Microbiol & Mol Genet, E Lansing, MI 48824 USA
 COUNTRY OF AUTHOR: USA
 SOURCE: INFECTION AND IMMUNITY, (FEB 2002) Vol. 70, No. 2, pp. 794-802.
 Publisher: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA.
 ISSN: 0019-9567.
 DOCUMENT TYPE: Article; Journal
 LANGUAGE: English
 REFERENCE COUNT: 46

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 49 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)
 ACCESSION NUMBER: 2002:73363 SCISEARCH
 THE GENUINE ARTICLE: 511EA
 TITLE: Elevated hydroperoxide levels and antioxidant patterns in Papillon-Lefevre syndrome
 AUTHOR: Battino M (Reprint); Ferreiro M S; Bompadre S; Leone L; Mosca F; Bullon P
 CORPORATE SOURCE: Univ Ancona, Fac Med, Inst Biochem, Sch Med, Via Ranieri 65, I-60100 Ancona, Italy (Reprint); Univ Ancona, Fac Med, Inst Biochem, Sch Med, I-60100 Ancona, Italy; Univ Sevilla, Sch Dent, Dept Periodontol, Seville, Spain; Univ Ancona, Sch Med, Inst Biomed Sci, I-60100 Ancona, Italy
 COUNTRY OF AUTHOR: Italy; Spain
 SOURCE: JOURNAL OF PERIODONTOLOGY, (DEC 2001) Vol. 72, No. 12, pp. 1760-1766.
 Publisher: AMER ACAD PERIODONTOLOGY, 737 NORTH MICHIGAN AVENUE, SUITE 800, CHICAGO, IL 60611-2690 USA.
 ISSN: 0022-3492.
 DOCUMENT TYPE: Article; Journal
 LANGUAGE: English
 REFERENCE COUNT: 53

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 50 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)
 ACCESSION NUMBER: 2001:532035 SCISEARCH
 THE GENUINE ARTICLE: 446ZR
 TITLE: Analysis of the effect of changing environmental conditions on the expression patterns of exported surface-associated proteins of the oral pathogen **Actinobacillus actinomycetemcomitans**
 AUTHOR: Fletcher J M; Nair S P; Ward J M; Henderson B; Wilson M (Reprint)
 CORPORATE SOURCE: Univ Coll London, Eastman Dent Inst, Dept Microbiol, 256 Grays Inn Rd, London WC1X 8LD, England (Reprint); Univ Coll London, Eastman Dent Inst, Dept Microbiol, London WC1X 8LD, England; Univ Coll London, Eastman Dent Inst, Cellular Microbiol Res Unit, London WC1X 8LD, England; Univ Coll London, Dept Biochem & Mol Biol, London WC1E 6BT, England
 COUNTRY OF AUTHOR: England
 SOURCE: MICROBIAL PATHOGENESIS, (JUN 2001) Vol. 30, No. 6, pp. 359-368.
 Publisher: ACADEMIC PRESS LTD, 24-28 OVAL RD, LONDON NW1 7DX, ENGLAND.

ISSN: 0882-4010.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 48
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 51 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2001:282266 SCISEARCH
THE GENUINE ARTICLE: 414TF
TITLE: A simple technique for the simultaneous determination of
molecular weight and activity of **superoxide**
dismutase using SDS-PAGE
AUTHOR: Chen J R; Liao C W; Mao S J T; Chen T H; Weng C N
(Reprint)
CORPORATE SOURCE: Pig Res Inst Taiwan, Dept Pathobiol, POB 23, Chunan 35099,
Miaoli, Taiwan (Reprint); Pig Res Inst Taiwan, Dept
Pathobiol, Chunan 35099, Miaoli, Taiwan
COUNTRY OF AUTHOR: Taiwan
SOURCE: JOURNAL OF BIOCHEMICAL AND BIOPHYSICAL METHODS, (26 FEB
2001) Vol. 47, No. 3, pp. 233-237.
Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE
AMSTERDAM, NETHERLANDS.
ISSN: 0165-022X.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 21
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 52 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2000:726093 SCISEARCH
THE GENUINE ARTICLE: 355VG
TITLE: Functional and crystallographic characterization of
Salmonella typhimurium Cu,Zn **superoxide**
dismutase coded by the sodCI virulence gene
AUTHOR: Pesce A; Battistoni A; Stroppolo M E; Polizio F; Nardini
M; Kroll J S; Langford P R; O'Neill P; Sette M; Desideri A
(Reprint); Bolognesi M
CORPORATE SOURCE: INFM, VIA RIC SCI, I-00133 ROME, ITALY (Reprint); INFM,
I-00133 ROME, ITALY; UNIV ROMA TOR VERGATA, DEPT BIOL,
I-00133 ROME, ITALY; UNIV ROMA TOR VERGATA, DEPT CHEM SCI
& TECHNOL, I-00133 ROME, ITALY; INFM, DEPT PHYS, I-16132
GENOA, ITALY; UNIV GENOA, IST, ADV BIOTECHNOL CTR, I-16132
GENOA, ITALY; UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED,
ST MARYS HOSP, SCH MED, DEPT PAEDIAT, LONDON W2 1PG,
ENGLAND; MRC, RADIOBIOL UNIT, DIDCOT OX11 0RD, OXON,
ENGLAND; UNIV GRONINGEN, BIOPHYS CHEM LAB, NL-9747 AG
GRONINGEN, NETHERLANDS; UNIV GRONINGEN, BIOSON RES INST,
DEPT CHEM, NL-9747 AG GRONINGEN, NETHERLANDS
COUNTRY OF AUTHOR: ITALY; ENGLAND; NETHERLANDS
SOURCE: JOURNAL OF MOLECULAR BIOLOGY, (15 SEP 2000) Vol. 302, No.
2, pp. 465-478.
Publisher: ACADEMIC PRESS LTD, 24-28 OVAL RD, LONDON NW1
7DX, ENGLAND.
ISSN: 0022-2836.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 57
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 53 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2000:574795 SCISEARCH
THE GENUINE ARTICLE: 337AY
TITLE: [Cu,Zn]-**superoxide dismutase** mutants

of the swine pathogen **Actinobacillus**
pleuropneumoniae are unattenuated in infections of the
natural host

AUTHOR: Sheehan B J; Langford P R; Rycroft A N; Kroll J S
(Reprint)
CORPORATE SOURCE: UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED, SCH MED, MOL
INFECT DIS GRP, DEPT PAEDIAT, LONDON W2 1PG, ENGLAND
(Reprint); UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED,
SCH MED, MOL INFECT DIS GRP, DEPT PAEDIAT, LONDON W2 1PG,
ENGLAND; UNIV LONDON, DEPT PATHOL & INFECT DIS, UNIV
LONDON ROYAL VET COLL, HATFIELD AL9 7TA, HERTS, ENGLAND
COUNTRY OF AUTHOR: ENGLAND
SOURCE: INFECTION AND IMMUNITY, (AUG 2000) Vol. 68, No. 8, pp.
4778-4781.
Publisher: AMER SOC MICROBIOLOGY, 1752 N ST NW,
WASHINGTON, DC 20036-2904.
ISSN: 0019-9567.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 40

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 54 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)

ACCESSION NUMBER: 2000:136639 SCISEARCH

THE GENUINE ARTICLE: 283VC

TITLE: Cu,Zn **superoxide dismutase** structure
from a microbial pathogen establishes a class with a
conserved dimer interface

AUTHOR: Forest K T (Reprint); Langford P R; Kroll J S; Getzoff E D

CORPORATE SOURCE: SCRIPPS CLIN, RES INST, DEPT BIOL MOL, MAIL DROP MB-4,
10550 N TORREY PINES RD, LA JOLLA, CA 92037 (Reprint);
SCRIPPS CLIN, RES INST, SKAGGS INST CHEM BIOL, LA JOLLA,
CA 92037; UNIV WISCONSIN, DEPT BACTERIOL, MADISON, WI
53706; UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED, ST
MARYS HOSP, MOL INFECT DIS GRP, LONDON W2 1PG, ENGLAND

COUNTRY OF AUTHOR: USA; ENGLAND

SOURCE: JOURNAL OF MOLECULAR BIOLOGY, (11 FEB 2000) Vol. 296, No.
1, pp. 145-153.

Publisher: ACADEMIC PRESS LTD, 24-28 OVAL RD, LONDON NW1
7DX, ENGLAND.

ISSN: 0022-2836.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: LIFE

LANGUAGE: English

REFERENCE COUNT: 44

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 55 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)

ACCESSION NUMBER: 1998:100798 SCISEARCH

THE GENUINE ARTICLE: YT605

TITLE: Periplasmic copper-zinc **superoxide**
dismutase protects *Haemophilus ducreyi* from
exogenous superoxide

AUTHOR: SanMateo L R; Hobbs M M; Kawula T H (Reprint)

CORPORATE SOURCE: UNIV N CAROLINA, SCH MED, DEPT MICROBIOL & IMMUNOL, CHAPEL
HILL, NC 27599 (Reprint); UNIV N CAROLINA, SCH MED, DEPT
MICROBIOL & IMMUNOL, CHAPEL HILL, NC 27599

COUNTRY OF AUTHOR: USA

SOURCE: MOLECULAR MICROBIOLOGY, (JAN 1998) Vol. 27, No. 2, pp.
391-404.

Publisher: BLACKWELL SCIENCE LTD, P O BOX 88, OSNEY MEAD,
OXFORD, OXON, ENGLAND OX2 ONE.

ISSN: 0950-382X.

DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 80

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 56 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)

ACCESSION NUMBER: 96:879178 SCISEARCH

THE GENUINE ARTICLE: VU635

TITLE: Cloning and molecular characterization of Cu,Zn
superoxide dismutase from
Actinobacillus pleuropneumoniae

AUTHOR: Langford P R; Loynds B M; Kroll J S (Reprint)

CORPORATE SOURCE: ST MARYS HOSP, IMPERIAL COLL, SCH MED, MOL INFECT DIS GRP,
LONDON W2 1PG, ENGLAND (Reprint); ST MARYS HOSP, IMPERIAL
COLL, SCH MED, MOL INFECT DIS GRP, LONDON W2 1PG, ENGLAND

COUNTRY OF AUTHOR: ENGLAND

SOURCE: INFECTION AND IMMUNITY, (DEC 1996) Vol. 64, No. 12, pp.
5035-5041.

Publisher: AMER SOC MICROBIOLOGY, 1325 MASSACHUSETTS
AVENUE, NW, WASHINGTON, DC 20005-4171.

ISSN: 0019-9567.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: LIFE

LANGUAGE: English

REFERENCE COUNT: 57

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 57 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)

ACCESSION NUMBER: 95:677127 SCISEARCH

THE GENUINE ARTICLE: RW652

TITLE: BACTERIAL [CU,ZN]-**SUPEROXIDE DISMUTASE**
- PHYLOGENETICALLY DISTINCT FROM THE EUKARYOTIC ENZYME,
AND NOT SO RARE AFTER ALL

AUTHOR: KROLL J S (Reprint); LANGFORD P R; WILKS K E; KEIL A D

CORPORATE SOURCE: UNIV LONDON IMPERIAL COLL SCI TECHNOL & MED, ST MARYS
HOSP, DEPT PAEDIAT, MOLEC INFECT DIS GRP, LONDON W2 1PG,
ENGLAND (Reprint)

COUNTRY OF AUTHOR: ENGLAND

SOURCE: MICROBIOLOGY-UK, (SEP 1995) Vol. 141, Part 9, pp.
2271-2279.

ISSN: 1350-0872.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: LIFE

LANGUAGE: ENGLISH

REFERENCE COUNT: 47

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 58 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)

ACCESSION NUMBER: 93:18340 SCISEARCH

THE GENUINE ARTICLE: KE621

TITLE: AN INVITRO STUDY OF POLYMORPHONUCLEAR LEUKOCYTE-MEDIATED
INJURY TO HUMAN GINGIVAL KERATINOCYTES BY PERIODONTOPATHIC
BACTERIAL EXTRACTS

AUTHOR: SUGIYAMA E (Reprint); BAEHNI P; CIMASONI G

CORPORATE SOURCE: UNIV GENEVA, SCH DENT MED, DIV PHYSIOPATHOL & PERIODONTOL,
CH-1211 GENEVA 4, SWITZERLAND (Reprint); UNIV GENEVA, SCH
DENT MED, DIV PREVENT DENT, CH-1211 GENEVA 4, SWITZERLAND

COUNTRY OF AUTHOR: SWITZERLAND

SOURCE: ARCHIVES OF ORAL BIOLOGY, (DEC 1992) Vol. 37, No. 12, pp.
1007-1012.

ISSN: 0003-9969.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: LIFE

LANGUAGE: ENGLISH
REFERENCE COUNT: 37

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 59 OF 74 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 92:18932 SCISEARCH
THE GENUINE ARTICLE: GX073
TITLE: SENSITIVITY OF **ACTINOBACILLUS**
-ACTINOMYCETEMCOMITANS AND HAEMOPHILUS-APHROPHILUS TO
OXIDATIVE KILLING
AUTHOR: DONGARI A I; MIYASAKI K T (Reprint)
CORPORATE SOURCE: UNIV CALIF LOS ANGELES, CTR HLTH SCI, SCH DENT, ORAL BIOL
SECT, CHS 63-050, LOS ANGELES, CA, 90024
COUNTRY OF AUTHOR: USA
SOURCE: ORAL MICROBIOLOGY AND IMMUNOLOGY, (DEC 1991) Vol. 6, No.
6, pp. 363-372.
ISSN: 0902-0055.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: ENGLISH
REFERENCE COUNT: No References Keyed
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L14 ANSWER 60 OF 74 USPATFULL
ACCESSION NUMBER: 2002:102627 USPATFULL
TITLE: Sequence directed DNA binding molecules compositions
and methods
INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
Cantor, Charles R., Boston, MA, United States
Andrews, Beth M., Maynard, MA, United States
Turin, Lisa M., Redwood City, CA, United States
Fry, Kirk E., Palo Alto, CA, United States
PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6384208	B1	20020507
APPLICATION INFO.:	US 1999-354947		19990715 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1995-482080, filed on 7 Jun 1995, now patented, Pat. No. US 6010849, issued on 4 Jan 2000 Division of Ser. No. US 1993-171389, filed on 20 Dec 1993, now patented, Pat. No. US 5578444, issued on 26 Nov 1996 Continuation-in-part of Ser. No. US 1993-123936, filed on 17 Sep 1993, now patented, Pat. No. US 5726014, issued on 10 Mar 1998 Continuation-in-part of Ser. No. US 1992-996783, filed on 23 Dec 1992, now patented, Pat. No. US 5693463, issued on 2 Dec 1997 Continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Schwartzman, Robert A.		
ASSISTANT EXAMINER:	Davis, Katharine F.		
LEGAL REPRESENTATIVE:	Fabian, Gary, Thrower, Larry W., Perkins Coie LLP		
NUMBER OF CLAIMS:	1		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	71 Drawing Figure(s); 47 Drawing Page(s)		
LINE COUNT:	5215		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L14 ANSWER 61 OF 74 USPATFULL
ACCESSION NUMBER: 2002:75643 USPATFULL
TITLE: Methods comprising apoptosis inhibitors for the

INVENTOR(S): generation of transgenic pigs
Piedrahita, Jorge A., College Station, TX, United States
PATENT ASSIGNEE(S): Bazer, Fuller W., College Station, TX, United States
Texas A&M University System, College Station, TX,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6369294	B1	20020409
	US 2002045253	A1	20020418
APPLICATION INFO.:	US 2001-819964		20010328 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-949155, filed on 10 Oct 1997, now patented, Pat. No. US 6271436		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-46094P	19970509 (60)
	US 1996-27338P	19961011 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Crouch, Deborah	
ASSISTANT EXAMINER:	Pappu, Sita	
LEGAL REPRESENTATIVE:	Bracewell & Patterson L.L.P.	
NUMBER OF CLAIMS:	58	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)	
LINE COUNT:	9398	

L14 ANSWER 62 OF 74 USPATFULL
ACCESSION NUMBER: 2002:70106 USPATFULL
TITLE: Sequences of E. coli O157
INVENTOR(S): Blattner, Frederick R., Madison, WI, United States
Burland, Valerie, Cross Plains, WI, United States
Perna, Nicole T., Madison, WI, United States
Plunkett, Guy, Madison, WI, United States
Welch, Rod, Madison, WI, United States
PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation, Madison, WI,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6365723	B1	20020402
APPLICATION INFO.:	US 1999-453702		19991203 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Fredman, Jeffrey		
LEGAL REPRESENTATIVE:	Quarles & Brady LLP		
NUMBER OF CLAIMS:	2		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)		
LINE COUNT:	1583		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 63 OF 74 USPATFULL
ACCESSION NUMBER: 2002:50802 USPATFULL
TITLE: Computer readable genomic sequence of Haemophilus influenzae Rd, fragments thereof, and uses thereof
INVENTOR(S): Fleischmann, Robert D., Gaithersburg, MD, United States
Adams, Mark D., N. Potomac, MD, United States
White, Owen, Gaithersburg, MD, United States
Smith, Hamilton O., Towson, MD, United States
Venter, J. Craig, Potomac, MD, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United

States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6355450	B1	20020312
APPLICATION INFO.:	US 1995-476102		19950607 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-426787, filed on 21 Apr 1995, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Campell, Bruce R.		
NUMBER OF CLAIMS:	88		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	47 Drawing Figure(s); 47 Drawing Page(s)		
LINE COUNT:	4666		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L14 ANSWER 64 OF 74 USPATFULL
ACCESSION NUMBER: 2001:126193 USPATFULL
TITLE: Cells and methods for the generation of transgenic pigs
INVENTOR(S): Piedrahita, Jorge A., College Station, TX, United States
Bazer, Fuller W., College Station, TX, United States
PATENT ASSIGNEE(S): The Texas A & M University System, College Station, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6271436	B1	20010807
APPLICATION INFO.:	US 1997-949155		19971010 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-27338P	19961011 (60)
	US 1997-46094P	19970509 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Martin, Jill D.	
LEGAL REPRESENTATIVE:	Williams, Morgan & Amerson	
NUMBER OF CLAIMS:	69	
EXEMPLARY CLAIM:	55	
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)	
LINE COUNT:	8905	

L14 ANSWER 65 OF 74 USPATFULL
ACCESSION NUMBER: 2001:67794 USPATFULL
TITLE: Human respiratory syncytial virus peptides with antifusogenic and antiviral activities
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6228983	B1	20010508
APPLICATION INFO.:	US 1995-485264		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933		

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Scheiner, Laurie
 ASSISTANT EXAMINER: Parkin, Jeffrey S.
 LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
 NUMBER OF CLAIMS: 62
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)
 LINE COUNT: 32166
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 66 OF 74 USPATFULL

ACCESSION NUMBER: 2000:40645 USPATFULL
 TITLE: Composition for preventing or treating periodontal diseases comprising extract from *Achyranthis radix* or *Ulmus cortex*
 INVENTOR(S): Kim, Moon Moo, Daejeon, Korea, Republic of
 Kim, Sang Nyun, Daejeon, Korea, Republic of
 Seok, Jae Kyun, Daejeon, Korea, Republic of
 Choi, Kyung Chul, Daejeon, Korea, Republic of
 PATENT ASSIGNEE(S): LG Chemical Ltd., Seoul, Korea, Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6045800		20000404
APPLICATION INFO.:	US 1998-31063		19980226 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1997-51004	19971002
	JP 1997-336204	19971205

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Kulkosky, Peter F.
 LEGAL REPRESENTATIVE: Birch, Stewart, Kolasch & Birch, LLP
 NUMBER OF CLAIMS: 17
 EXEMPLARY CLAIM: 1
 LINE COUNT: 1973
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 67 OF 74 USPATFULL

ACCESSION NUMBER: 2000:1692 USPATFULL
 TITLE: Sequence-directed DNA binding molecules compositions and methods
 INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Maynard, MA, United States
 Turin, Lisa M., Redwood City, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6010849		20000104
APPLICATION INFO.:	US 1995-482080		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-171389, filed on 20 Dec 1993, now patented, Pat. No. US 5578444 which is a continuation-in-part of Ser. No. US 1993-123936, filed on 17 Sep 1993, now patented, Pat. No. US 5726014 which is a continuation-in-part of Ser. No. US 1992-996783, filed on 23 Dec 1992, now patented, Pat. No. US 5693463 which is a continuation-in-part of Ser. No. US		

1991-723618, filed on 27 Jun 1991, now abandoned

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Degen, Nancy
 ASSISTANT EXAMINER: Schwartzman, Robert
 LEGAL REPRESENTATIVE: Fabin, Gary R. Dehlinger & Associates
 NUMBER OF CLAIMS: 11
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 48 Drawing Figure(s); 47 Drawing Page(s)
 LINE COUNT: 10022
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 68 OF 74 USPATFULL

ACCESSION NUMBER: 1999:18912 USPATFULL
 TITLE: Method of determining DNA sequence preference of a DNA-binding molecule
 INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Maynard, MA, United States
 Turin, Lisa M., Redwood City, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5869241		19990209
APPLICATION INFO.:	US 1995-475228		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-171389, filed on 20 Dec 1993, now patented, Pat. No. US 5578444 which is a continuation-in-part of Ser. No. US 1993-123936, filed on 17 Sep 1993, now patented, Pat. No. US 5726014 which is a continuation-in-part of Ser. No. US 1992-996783, filed on 23 Dec 1992, now patented, Pat. No. US 5693463 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Zitomer, Stephanie W.		
ASSISTANT EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Fabian, Gary R., Stratford, Carol A., Dehlinger, Peter J.		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	72 Drawing Figure(s); 47 Drawing Page(s)		
LINE COUNT:	9840		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L14 ANSWER 69 OF 74 USPATFULL

ACCESSION NUMBER: 1998:44877 USPATFULL
 TITLE: Sequence-directed DNA-binding molecules compositions and methods
 INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Maynard, MA, United States
 PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5744131		19980428
APPLICATION INFO.:	US 1995-476876		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1992-996783, filed on 23 Dec		

1992 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Zitomer, Stephanie W.
 ASSISTANT EXAMINER: Atzel, Amy
 LEGAL REPRESENTATIVE: Fabian, Gary R., Stratford, Carol A., Dehlinger, Peter J.
 NUMBER OF CLAIMS: 3
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 48 Drawing Figure(s); 33 Drawing Page(s)
 LINE COUNT: 5113
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 70 OF 74 USPATFULL
 ACCESSION NUMBER: 1998:39383 USPATFULL
 TITLE: Sequence-directed DNA-binding molecules compositions and methods
 INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
 Fry, Kirk E., Palo Alto, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Maynard, MA, United States
 PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5738990		19980414
APPLICATION INFO.:	US 1995-475221		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1992-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Guzo, David		
ASSISTANT EXAMINER:	Brusca, John S.		
LEGAL REPRESENTATIVE:	Fabian, Gary R., Stratford, Carol A., Dehlinger, Peter J.		
NUMBER OF CLAIMS:	5		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	48 Drawing Figure(s); 33 Drawing Page(s)		
LINE COUNT:	5040		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L14 ANSWER 71 OF 74 USPATFULL
 ACCESSION NUMBER: 1998:25075 USPATFULL
 TITLE: Screening assay for the detection of DNA-binding molecules
 INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
 Cantor, Charles R., Boston, MA, United States
 Andrews, Beth M., Watertown, MA, United States
 Turin, Lisa M., Berkeley, CA, United States
 PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5726014		19980310
APPLICATION INFO.:	US 1993-123936		19930917 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

PRIMARY EXAMINER: Jones, W. Gary
ASSISTANT EXAMINER: Atzel, Amy
LEGAL REPRESENTATIVE: Fabian, Gary R., Stratford, Carol A., Dehlinger, Peter J.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 72 Drawing Figure(s); 47 Drawing Page(s)
LINE COUNT: 5659
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 72 OF 74 USPATFULL
ACCESSION NUMBER: 1998:14634 USPATFULL
TITLE: Method of constructing sequence-specific DNA-binding molecules
INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
Fry, Kirk E., Palo Alto, CA, United States
Cantor, Charles R., Boston, MA, United States
Andrews, Beth M., Watertown, MA, United States
PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5716780		19980210
APPLICATION INFO.:	US 1995-484499		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1992-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Jones, W. Gary		
ASSISTANT EXAMINER:	Atzel, Amy		
LEGAL REPRESENTATIVE:	Fabian, Gary R., Stratford, Carol A., Dehlinger, Peter J.		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	48 Drawing Figure(s); 33 Drawing Page(s)		
LINE COUNT:	4929		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 73 OF 74 USPATFULL
ACCESSION NUMBER: 96:108816 USPATFULL
TITLE: Sequence-directed DNA-binding molecules compositions and methods
INVENTOR(S): Edwards, Cynthia A., Menlo Park, CA, United States
Cantor, Charles R., Boston, MA, United States
Andrews, Beth M., Maynard, MA, United States
Turin, Lisa M., Redwood City, CA, United States
Fry, Kirk E., Palo Alto, CA, United States
PATENT ASSIGNEE(S): Genelabs Technologies, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5578444		19961126
APPLICATION INFO.:	US 1993-171389		19931220 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-123936, filed on 17 Sep 1993 which is a continuation-in-part of Ser. No. US 1992-996783, filed on 23 Dec 1992 which is a continuation-in-part of Ser. No. US 1991-723618, filed on 27 Jun 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Zitomer, Stephanie W.		

ASSISTANT EXAMINER: Atzel, Amy
LEGAL REPRESENTATIVE: Fabian, Gary R., Brookes, Allen A., Stratford, Carol A.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 71 Drawing Figure(s); 48 Drawing Page(s)
LINE COUNT: 5845
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 74 OF 74 USPATFULL
ACCESSION NUMBER: 80:56609 USPATFULL
TITLE: Reagents and method employing channeling
INVENTOR(S): Maggio, Edward T., Redwood City, CA, United States
Wife, Richard L., Sittingbourne, England
Ullman, Edwin F., Atherton, CA, United States
PATENT ASSIGNEE(S): Syva Company, Palo Alto, CA, United States (U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4233402		19801111
APPLICATION INFO.:	US 1978-893650		19780405 (5)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Warden, Robert J.		
LEGAL REPRESENTATIVE:	Rowland, Bertram I.		
NUMBER OF CLAIMS:	44		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1842		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

7 ANSWER 1 OF 20 USPATFULL

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

AN 2002:272761 USPATFULL

TI Directed evolution of novel binding proteins

IN Ladner, Robert Charles, Ijamsville, MD, UNITED STATES

Guterman, Sonia Kosow, Belmont, MA, UNITED STATES

Roberts, Bruce Lindsay, Milford, MA, UNITED STATES

Markland, William, Milford, MA, UNITED STATES

Ley, Arthur Charles, Newton, MA, UNITED STATES

Kent, Rachel Baribault, Boxborough, MA, UNITED STATES

PI US 2002150881 A1 20021017

AI US 2001-781988 A1 20010214 (9)

RLI Continuation of Ser. No. US 1998-192067, filed on 16 Nov 1998, ABANDONED

Continuation of Ser. No. US 1995-415922, filed on 3 Apr 1995, PATENTED

Continuation of Ser. No. US 1993-9319, filed on 26 Jan 1993, PATENTED

Division of Ser. No. US 1991-664989, filed on 1 Mar 1991, PATENTED

Continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990,

ABANDONED Continuation-in-part of Ser. No. US 1988-240160, filed on 2

Sep 1988, ABANDONED

PRAI WO 1989-US3731 19890901

DT Utility

FS APPLICATION

LREP BROWDY AND NEIMARK, P.L.L.C., 624 Ninth Street, N.W., Washington, DC, 20001

CLMN Number of Claims: 18

ECL Exemplary Claim: 1

DRWN 16 Drawing Page(s)

LN.CNT 15696

L7 ANSWER 2 OF 20 USPATFULL

AB The invention relates to a process for molding a copolymer of a polyalkylene glycol terephthalate and an aromatic ester, comprising the steps of: a) preparing a solution of the copolymer in a suitable first solvent; and b) forming a gel of the solution.

AN 2002:236176 USPATFULL

TI Molding of a polymer

IN Bezemer, Jeroen Mattijs, Utrecht, NETHERLANDS

de Wijn, Joost Robert, Nijmegen, NETHERLANDS

Nieuwenhuis, Jan, Gorinchem, NETHERLANDS

PA IsoTis N.V., Bilthoven, NETHERLANDS (non-U.S. corporation)

PI US 2002128378 A1 20020912

AI US 2002-47427 A1 20020115 (10)

RLI Continuation of Ser. No. WO 2000-NL554, filed on 4 Aug 2000, UNKNOWN

PRAI EP 1999-202599 19990806

DT Utility

FS APPLICATION

LREP BANNER & WITCOFF, LTD., 28 STATE STREET, 28th FLOOR, BOSTON, MA, 02109

CLMN Number of Claims: 12

ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 586
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 3 OF 20 USPATFULL

AB The present invention relates to novel members of the Tumor Necrosis Factor family of receptors. The invention provides isolated nucleic acid molecules encoding human TR11, TR11SV1, and TR11SV2 receptors. TR11, TR11SV1, and TR11SV2 polypeptides are also provided, as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of TR11, TR11SV1, and TR11SV2 receptor activity. The present invention further relates to antibodies that specifically bind TR11, TR11SV1, and/or TR11SV2. Also provided are diagnostic methods for detecting disease states related to the aberrant expression of TR11, TR11SV1, and TR11SV2 receptors. Further provided are therapeutic methods for treating disease states related to aberrant proliferation and differentiation of cells which express the TR11, TR11SV1, and TR11SV2 receptors.

AN 2002:185613 USPATFULL

TI Human tumor, necrosis factor receptor-like proteins TR11, TR11SV1 and TR11SV2

IN Ni, Jian, Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)

PI US 2002098525 A1 20020725

AI US 2001-915593 A1 20010727 (9)

RLI Continuation-in-part of Ser. No. US 2000-512363, filed on 23 Feb 2000,
PENDING Continuation-in-part of Ser. No. US 1998-176200, filed on 21 Oct
1998, PENDING

PRAI US 2000-221577P 20000728 (60)
US 1999-144076P 19990716 (60)
US 1999-134172P 19990513 (60)
US 1999-121648P 19990224 (60)
US 1997-63212P 19971021 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 11 Drawing Page(s)

LN.CNT 12618

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 4 OF 20 USPATFULL

AB The present invention relates to novel pancreatic related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "pancreatic antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such pancreatic polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the pancreas, including, but not limited to, the presence of pancreatic cancer and pancreatic cancer metastases. More specifically, isolated pancreatic nucleic acid molecules are provided encoding novel pancreatic polypeptides. Novel pancreatic polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human pancreatic polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the pancreas, including pancreatic cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and

polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

AN 2002:157060 USPATFULL
TI Nucleic acids, proteins and antibodies
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002081659 A1 20020627
AI US 2001-925297 A1 20010810 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US5989, filed on 8 Mar 2000, UNKNOWN
PRAI US 1999-124270P 19990312 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 20326
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 5 OF 20 USPATFULL

AB There can be provided a fungal antigen which is an insoluble fraction obtainable from fungal cells of which cell wall has been substantially removed or at least partially removed; a process for producing the same; a nucleic acid encoding the fungal antigen; a biologic product containing the fungal antigen; a method of stimulating immunological responses by using the biologic product; a method of suppressing allergic reaction to fungi in a vertebrate; and a method for diagnosing a disease caused by fungi in a vertebrate.

AN 2002:112558 USPATFULL
TI Fungal antigens and process for producing the same
IN Takesako, Kazutoh, Otsu-shi, JAPAN
Mizutani, Shigetoshi, Gamo-gun, JAPAN
Endo, Masahiro, Kusatsu-shi, JAPAN
Kato, Ikunoshin, Uji-shi, JAPAN
PA TAKARA SHUZO CO., LTD, Kyoto, JAPAN (non-U.S. corporation)
PI US 2002058293 A1 20020516
AI US 2001-987190 A1 20011113 (9)
RLI Division of Ser. No. US 1999-262856, filed on 4 Mar 1999, PENDING
PRAI WO 1997-JP3041 19970829
JP 1996-255400 19960904
JP 1997-99775 19970331
DT Utility
FS APPLICATION
LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 3093
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 6 OF 20 USPATFULL

AB The present invention provides conjugate compounds comprising at least one heat shock protein or portion thereof including at least one immunostimulatory domain and at least one capsular oligosaccharide or polysaccharide of a pathogenic bacteria. The compound comprises oligosaccharides of the Meningococci C (MenC) group and a heat shock protein selected from M. bovis BCG GroEl-type 65 kDa hsp (hspR65), recombinant M. tuberculosis DnaK-type 70 kDa hsp (hspR70) and a heat shock protein from H. pylori. The invention also provides processes for producing conjugate compounds, pharmaceutical compositions comprising conjugate compounds, therapeutic compositions comprising conjugate compounds, and methods of inducing an immune response.

AN 2002:136574 USPATFULL
TI Conjugates formed from heat shock proteins and oligo-or polysaccharides
IN Rappuoli, Rino, Quercegrossa, ITALY
Costantino, Paolo, Colle d'Elsa, ITALY
Viti, Stefano, Sovicille, ITALY
Norelli, Francesco, Siena, ITALY
PA Chiron S.p.A., Siena, ITALY (non-U.S. corporation)
PI US 6403099 B1 20020611
WO 9317712 19930916
AI US 1994-256847 19941101 (8)
WO 1993-EP516 19930308
19941101 PCT 371 date
PRAI IT 1992-FI58 19920306
DT Utility
FS GRANTED
EXNAM Primary Examiner: Smith, Lynette R. F.; Assistant Examiner: Portner,
Ginny Allen
LREP Attwell, Gwilym J.O., Harbin, Alisa A., Blackburn, Robert P.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 1809
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 7 OF 20 USPATFULL
AB The present invention provides the sequencing of the entire genome of
Haemophilus influenzae Rd, SEQ ID NO: 1. The present invention further
provides the sequence information stored on computer readable media, and
computer-based systems and methods which facilitate its use. In addition
to the entire genomic sequence, the present invention identifies over
1700 protein encoding fragments of the genome and identifies, by
position relative to a unique Not I restriction endonuclease site, any
regulatory elements which modulate the expression of the protein
encoding fragments of the Haemophilus genome.
AN 2002:50802 USPATFULL
TI Computer readable genomic sequence of Haemophilus influenzae Rd,
fragments thereof, and uses thereof
IN Fleischmann, Robert D., Gaithersburg, MD, United States
Adams, Mark D., N. Potomac, MD, United States
White, Owen, Gaithersburg, MD, United States
Smith, Hamilton O., Towson, MD, United States
Venter, J. Craig, Potomac, MD, United States
PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S.
corporation)
PI US 6355450 B1 20020312
AI US 1995-476102 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1995-426787, filed on 21 Apr 1995,
now abandoned.
DT Utility
FS GRANTED
EXNAM Primary Examiner: Campell, Bruce R.
CLMN Number of Claims: 88
ECL Exemplary Claim: 1
DRWN 47 Drawing Figure(s); 47 Drawing Page(s)
LN.CNT 4666
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 8 OF 20 USPATFULL
AB There can be provided a fungal antigen which is an insoluble fraction
obtainable from fungal cells of which cell wall has been substantially
removed or at least partially removed; a process for producing the same;
a nucleic acid encoding the fungal antigen; a biologic product
containing the fungal antigen; a method of stimulating immunological
responses by using the biologic product; a method of suppressing

allergic reaction to fungi in a vertebrate; and a method for diagnosing a disease caused by fungi in a vertebrate.

AN 2001:235097 USPATFULL
TI Fungal antigens and process for producing the same
IN Takesako, Kazutoh, Otsu, Japan
Mizutani, Shigetoshi, Gamo-gun, Japan
Endo, Masahiro, Kusatsu, Japan
Kato, Ikunoshin, Uji, Japan
PA Takara Shuzo Co., Ltd., Kyoto, Japan (non-U.S. corporation)
PI US 6333164 B1 20011225
AI US 1999-262856 19990304 (9)
RLI Continuation-in-part of Ser. No. WO 1997-JP3041, filed on 29 Aug 1997
PRAI JP 1996-255400 19960904
JP 1997-99775 19970331
DT Utility
FS GRANTED
EXNAM Primary Examiner: Smith, Lynette R. F.; Assistant Examiner: Baskar, Padma
LREP Birch, Stewart, Kolasch & Birch, LLP
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 9 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 2782
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 9 OF 20 USPATFULL

AB The invention provides a drug-oligomer conjugate having the following general formula: ##STR1##

wherein D is a therapeutic drug moiety; H and H' are each a hydrophilic moiety, independently selected from the group consisting of straight or branched PEG polymers having from 2 to 130 PEG subunits, and sugars; L is a lipophilic moiety selected from the group consisting of alkyl groups having 2-26 carbon atoms, cholesterol, adamantane and fatty acids; o is a number from 1 to the maximum number of covalent bonding sites on H; m+n+p together have a value of at least one and not exceeding the total number of covalent bonding sites on D for the --H', --L and --H--L substituents; the H--L bond(s) are hydrolyzable and the D--L' bond(s), when present, are hydrolyzable; the conjugate being further characterized by one of the following: (i) m is 0 and p is at least 1; (ii) n is 0 and p is at least 1; (iii) m and n are each 0 and p is at least 1; (iv) p is 0 and m and n are each at least 1. The therapeutic drug moiety is preferably a therapeutic protein or peptide, preferably insulin or a functional equivalent thereof.

AN 2001:190719 USPATFULL
TI Amphiphilic drug-oligomer conjugates with hydrolyzable lipophile components and methods for making and using the same
IN Ekwuribe, Nnochiri, Cary, NC, United States
Ramaswamy, Muthukumar, Cary, NC, United States
Rajagopalan, Jayanthi Sethuraman, Cary, NC, United States
PA Nobex Corporation, Research Triangle Park, NC, United States (U.S. corporation)
PI US 6309633 B1 20011030
AI US 1999-336548 19990619 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Russel, Jeffrey E.
LREP Myers Bigel Sibley & Sajovec, P.A.
CLMN Number of Claims: 60
ECL Exemplary Claim: 49
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 2044
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 10 OF 20 USPATFULL

AB The present invention relates to peptides which exhibit antifusogenic and antiviral activities. The peptides of the invention consist of a 16 to 39 amino acid region of a human respiratory syncytial virus protein. These regions were identified through computer algorithms capable of recognizing the ALLMOTI5, 107x178x4, or PLZIP amino acid motifs. These motifs are associated with the antifusogenic and antiviral activities of the claimed peptides.

AN 2001:67794 USPATFULL

TI Human respiratory syncytial virus peptides with antifusogenic and antiviral activities

IN Barney, Shawn O'Lin, Cary, NC, United States

Lambert, Dennis Michael, Cary, NC, United States

Petteway, Stephen Robert, Cary, NC, United States

PA Trimeris, Inc., Durham, NC, United States (U.S. corporation)

PI US 6228983 B1 20010508

AI US 1995-485264 19950607 (8)

RLI Division of Ser. No. US 1995-470896, filed on 6 Jun 1995

Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994

Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994

Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933

DT Utility

FS Granted

EXNAM Primary Examiner: Scheiner, Laurie; Assistant Examiner: Parkin, Jeffrey S.

LREP Pennie & Edmonds LLP

CLMN Number of Claims: 62

ECL Exemplary Claim: 1

DRWN 84 Drawing Figure(s); 83 Drawing Page(s)

LN.CNT 32166

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2002 ACS

AB A compn. comprising transferrin binding proteins A and B is described (TbpA and TbpB). The compn. is suitable for use in vaccines and for treatment of Gram neg. bacterial infection, particularly meningococcal infection, demonstrating a broad spectrum of protection to a no. of different bacterial pathogens. Also described are compns. comprising Tbps and other components, such as Neisserial outer membrane vesicles and Cu,Zn-Superoxide dismutase. Methods for prepn. of these compns. and their uses in vaccination against disease are further provided.

AN 2000:314568 CAPLUS

DN 132:333377

TI Multicomponent meningococcal vaccine

IN Robinson, Andrew; Gorringe, Andrew Richard; Hudson, Michael John; Reddin, Karen Margaret

PA Microbiological Research Authority CAMR (Centre for Applied Microbiology & Research), UK

SO PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000025811	A2	20000511	WO 1999-GB3626	19991102
	WO 2000025811	A3	20001005		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 BR 9914946 A 20010710 BR 1999-14946 19991102
 EP 1126874 A2 20010829 EP 1999-954130 19991102
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 JP 2002528515 T2 20020903 JP 2000-579250 19991102
 PRAI GB 1998-23978 A 19981102
 WO 1999-GB3626 W 19991102

L7 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2002 ACS

AB The present invention relates to pharmaceutical compns. comprising Cu,Zn-
superoxide dismutase (Cu,Zn-SOD) of the dimeric type,
 nucleic acid encoding a Cu,Zn-SOD, or antibody to a Cu,Zn-SOD for treating
 and/or **vaccinating** against bacterial infection. Also described
 are methods for isolation of Cu,Zn-SODs and for prepn. of pharmaceutical
 compns., preferably for providing or eliciting protective immunity to
 meningococcal infection in an animal.

AN 2000:161457 CAPLUS

DN 132:206934

TI Cu,Zn-**Superoxide dismutase** or antibody thereto as
 vaccine against bacterial (including meningococcal) infection

IN Gorringer, Andrew Richard; Kroll, John Simon; Langford, Paul Richard;
 Robinson, Andrew

PA Microbiological Research Authority, UK; Imperial College of Science,
 Technology and Medicine

SO PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000012718	A1	20000309	WO 1999-GB2828	19990827
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9956350	A1	20000321	AU 1999-56350	19990827
	EP 1108038	A1	20010620	EP 1999-943065	19990827
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002523521	T2	20020730	JP 2000-567704	19990827
PRAI	GB 1998-18756	A	19980827		
	WO 1999-GB2828	W	19990827		

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 20 USPATFULL

AB A composition for delivering a biologically active agent to a host. The
 composition comprises a product including a biologically active agent
 encapsulated in a matrix comprising a polyetherester copolymer, such as
 a polyethylene glycol terephthalate/polybutylene terephthalate
 copolymer. The polyetherester copolymer protects the biologically active
 agent (including proteins, peptides, and small drug molecules) from
 degradation or denaturation, and therefore such copolymers may be
 employed in a variety of drug delivery systems and vaccines.

AN 1999:141355 USPATFULL
 TI Polyetherester copolymers as drug delivery matrices
 IN Goedemoed, Jaap H., Amsterdam, Netherlands
 Hennink, Wim E., Waddinxveen, Netherlands
 PA Osteotech, Inc., Eatontown, NJ, United States (U.S. corporation)
 PI US 5980948 19991109
 AI US 1996-699896 19960816 (8)
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Kulkosky, Peter F.
 LREP Banner & Witcoff, Ltd.
 CLMN Number of Claims: 48
 ECL Exemplary Claim: 1
 DRWN 18 Drawing Figure(s); 15 Drawing Page(s)
 LN.CNT 2170
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2002 ACS
 AB Methods are provided for protecting the eye from degenerative eye conditions by administering prophylactic histidine compns. Also provided are for treating ocular inflammation resulting from various causative agents, by administering therapeutic histidine compns. Further provided are histidine compns. for carrying out the methods.

AN 1998:618371 CAPLUS
 DN 129:255004
 TI Prophylactic and therapeutic methods for ocular degenerative diseases and inflammations, and histidine compositions therefor
 IN Thomas, Peter G.
 PA Cytos Pharmaceuticals LLC, USA
 SO U.S., 10 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5811446	A	19980922	US 1997-839805	19970418
	WO 9847366	A1	19981029	WO 1998-US7319	19980417
	W:				
	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9873583	A1	19981113	AU 1998-73583	19980417
PRAI	US 1997-839805		19970418		
	WO 1998-US7319		19980417		

L7 ANSWER 15 OF 20 USPATFULL
 AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment,

the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

AN 1998:143904 USPATFULL
TI Directed evolution of novel binding proteins
IN Ladner, Robert Charles, Ijamsville, MD, United States
Gutterman, Sonia Kosow, Belmont, MA, United States
Roberts, Bruce Lindsay, Milford, MA, United States
Markland, William, Milford, MA, United States
Ley, Arthur Charles, Newton, MA, United States
Kent, Rachel Baribault, Boxborough, MA, United States
PA Dyax, Corp., Cambridge, MA, United States (U.S. corporation)
PI US 5837500 19981117
AI US 1995-415922 19950403 (8)
RLI Continuation of Ser. No. US 1993-9319, filed on 26 Jan 1993, now patented, Pat. No. US 5403484 which is a division of Ser. No. US 1991-664989, filed on 1 Mar 1991, now patented, Pat. No. US 5223409 which is a continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Ulm, John
LREP Cooper, Iver P.
CLMN Number of Claims: 43
ECL Exemplary Claim: 1
DRWN 16 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 15973
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 16 OF 20 USPATFULL

AB The present invention provides a novel protein of pathogenic forms of **Neisseria**, as well as genes which encode PilC, i.e., the pilC loci. DNA sequences of pilC genes are useful as probes to diagnose the presence of microorganisms containing type 4 pilin as well as permitting production of polypeptides which are in turn useful in diagnostic tests and/or as components of vaccines. The invention also provides antibodies directed against pilC epitopes. These antibodies are useful for diagnostic tests as well as therapy.

AN 1998:139022 USPATFULL
TI Polypeptides and antibodies useful for the diagnosis and treatment of pathogenic **neisseria** and other microorganisms having type 4 pilin
IN Normark, Staffan, Clayton, MO, United States
Jonsson, Ann-Beth, Umea, Sweden
PA Washington University, St. Louis, MO, United States (U.S. corporation)
PI US 5834591 19981110
AI US 1995-415788 19950403 (8)
RLI Continuation of Ser. No. US 1992-829465, filed on 31 Jan 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-648781, filed on 31 Jan 1991, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Sidberry, Hazel F.
CLMN Number of Claims: 44
ECL Exemplary Claim: 1
DRWN 18 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 3804
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 17 OF 20 USPATFULL

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar

potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

AN 96:101466 USPATFULL
TI Directed evolution of novel binding proteins
IN Ladner, Robert C., Ijamsville, MD, United States
Guterman, Sonia K., Belmont, MA, United States
Roberts, Bruce L., Milford, MA, United States
Markland, William, Milford, MA, United States
Ley, Arthur C., Newton, MA, United States
Kent, Rachel B., Boxborough, MA, United States
PA Protein Engineering Corporation, Cambridge, MA, United States (U.S. corporation)
PI US 5571698 19961105
AI US 1993-57667 19930618 (8)
DCD 20100629
RLI Continuation of Ser. No. US 1991-664989, filed on 1 Mar 1991, now patented, Pat. No. US 5223409 which is a continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Ulm, John
LREP Cooper, Iver P.
CLMN Number of Claims: 83
ECL Exemplary Claim: 1
DRWN 16 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 15323
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 18 OF 20 USPATFULL

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

AN 95:29292 USPATFULL
TI Viruses expressing chimeric binding proteins
IN Ladner, Robert C., Ijamsville, MD, United States

Guterman, Sonia K., Belmont, MA, United States
 Roberts, Bruce L., Milford, MA, United States
 Markland, William, Milford, MA, United States
 Ley, Arthur C., Newton, MA, United States
 Kent, Rachel B., Boxborough, MA, United States
 PA Protein Engineering Corporation, Cambridge, MA, United States (U.S. corporation)
 PI US 5403484 19950404
 AI US 1993-9319 19930126 (8)
 RLI Division of Ser. No. US 1991-664989, filed on 1 Mar 1991, now patented, Pat. No. US 5223409 which is a continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, now abandoned
 PRAI WO 1989-3731 19890901
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Hill, Jr., Robert J.; Assistant Examiner: Ulm, John D.
 LREP Cooper, Iver P.
 CLMN Number of Claims: 49
 ECL Exemplary Claim: 1
 DRWN 16 Drawing Figure(s); 16 Drawing Page(s)
 LN.CNT 14368
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 19 OF 20 USPATFULL

AB In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

AN 93:52487 USPATFULL

TI Directed evolution of novel binding proteins

IN Ladner, Robert C., Ijamsville, MD, United States

Guterman, Sonia K., Belmont, MA, United States

Roberts, Bruce L., Milford, MA, United States

Markland, William, Milford, MA, United States

Ley, Arthur C., Newton, MA, United States

Kent, Rachel B., Boxborough, MA, United States

PA Protein Engineering Corp., Cambridge, MA, United States (U.S. corporation)

PI US 5223409 19930629

AI US 1991-664989 19910301 (7)

RLI Continuation-in-part of Ser. No. US 1990-487063, filed on 2 Mar 1990, now abandoned And a continuation-in-part of Ser. No. US 1988-240160, filed on 2 Sep 1988, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Hill, Jr., Robert J.; Assistant Examiner: Ulm, John D.

LREP Cooper, Iver P.

CLMN Number of Claims: 66

ECL Exemplary Claim: 1

DRWN 16 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 15410
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 20 OF 20 USPATFULL

AB Method and compositions are provided for chemical analysis of an analyte which is a member of a specific binding pair of organic substances consisting of ligand and ligand receptor (antiligand). The method involves bringing together the following reagents with the analyte in an aqueous assay medium under mild conditions.

The first reagent is a conjugate of a member of the specific binding pair with a chemical entity which provides a means for chemically changing the concentration of a compound which acts as a signal mediator. The second reagent is the signal mediator precursor. The third reagent is a conjugate of a member of the specific binding pair with a component of a signal producing system of which system the signal mediator is a member.

The amount of signal which can be detected is affected by the local concentration of the signal mediator. By bringing the reagents together in the presence of analyte, where the signal mediator concentration changing means is brought together in a microenvironment with the conjugated signal producing system component, localized concentrations of the signal mediator can be created which differ from the gross concentration of the signal mediator in the assay medium. The degree to which the signal mediator concentration changing means is in close proximity to the signal producing means in a microenvironment will affect the observed signal. By appropriate choice of the two conjugates in conjunction with the analyte, the observed signal can be related to the amount of analyte in the medium.

Novel conjugates are provided, as well as combinations of conjugates in specific proportions to substantially optimize the assay sensitivity. The combinations are provided as kits, where ancillary reagents can also be included, so as to simplify the combination of reagents, as well as provide for more accurate measurements and relative proportions of reagents.

AN 80:56609 USPATFULL
TI Reagents and method employing channeling
IN Maggio, Edward T., Redwood City, CA, United States
Wife, Richard L., Sittingbourne, England
Ullman, Edwin F., Atherton, CA, United States
PA Syva Company, Palo Alto, CA, United States (U.S. corporation)
PI US 4233402 19801111
AI US 1978-893650 19780405 (5)
DT Utility
FS Granted
EXNAM Primary Examiner: Warden, Robert J.
LREP Rowland, Bertram I.
CLMN Number of Claims: 44
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1842
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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